

# **Factors Preventing the Uptake of HIV Counseling and Testing (HCT) Programmes: The Case of the Industrial Development Corporation in Johannesburg, South Africa.**

by  
Mapule Linah Mooketsi

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Supervisor: Prof. JCD Augustyn

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## **DECLARATION**

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## ABSTRACT

HIV counseling and testing (HCT) is a cornerstone of both HIV prevention and care in South Africa, but only one in five South Africans who are aware of HCT services have been tested for HIV and hence the uptake is reportedly low. This study investigated factors that prevent the uptake of HCT programme in the workplace. Specific factors that were looked at include: fear of learning about one's HIV status, HIV-stigma and discrimination and knowledge of and attitudes towards HCT.

The study employed descriptive survey design; anonymous questionnaires were randomly distributed irrespective of age, gender, marital status, race, educational level, work position and experience. Closed and open-ended easy- to- answer questions which were written in English were asked; and they required fewer instructions. Ethical issues were considered and university guidelines followed.

The results of this study showed that a great proportion of participants (93.8%) tested for HIV as compared to (6.2%) who had never tested. Of these, 59.4 % tested because they wanted to know their HIV status and, 43.8% of participants preferred using the workplace HCT programme for convenience; while 50% used private facilities for privacy and confidentiality. The study further established that fear of knowing one's HIV status, workplace discrimination, knowledge of and attitudes towards HCT were not associated with workplace HCT programme uptake. The results did however show that both participants who had tested and those who had not tested (68.8%) demonstrated significantly greater AIDS-related stigma.

Supportive and collaborative efforts are necessary to create and promote an enabling and conducive environment in order to dispel workplace HIV-related stigma. In addition, it is imperative to develop and implement workplace stigma mitigation strategy putting in place interventions that aim to reduce all forms of stigma, as well as emphasizing on the benefits of testing.

## OPSOMMING

MIV/Vigs-voorligting en toetsing is die hoeksteen vir beide die voorkoming en versorging van MIV-pasiënte in Suid-Afrika. Ongelukkig is net ongeveer een uit elke vyf mense bewus van hulle MIV-status. Die doel van hierdie studie is 'n poging om vas te stel waarom so min mense gebruik maak van gratis toetsingsdienste in die werksplek.

'n Beskrywende studie-ontwerp is in hierdie navorsing gebruik met anonieme vraelyste wat ewekansig versprei is onder 'n steekproef waarin geen onderskeid ten opsigte van ras, geslag, opvoedkundige vlak, posisie in die werk en ervaring gemaak is nie. Geslote en oop-einde vrae is gebruik en Engels is as kommunikasiemedium gebruik omdat al die proefpersone dit verstaan het.

Resultate van die studie het aangetoon dat beduidend meer mense hulle wel laat toets het teenoor die wat hulle nie laat toets het nie. Die studie het verder bevind dat faktore soos die vrees om status te weet; diskriminasie in die werksplek, kennis van en houding teenoor MIV/Vigs nie geassosieer kan word met die lae opname van vrywillige toetsing in die werksplek nie.

Die studie het wel bevind dat diegene wat hulle . laat toets het, beduidend meer stigma in die werksplek ondervind. Ondersteunende dienste is uiters nodig ten einde stigma suksesvol in die werksplek te bestuur. Daar word voorgestel dat daar 'n volledige opleidingsprogram ,in die werksplek van die organisasie wat in die studie gebruik is, ontwikkel moet word ten einde die invloed van stigma tot 'n minimum te beperk.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background and rationale for the study

HIV testing is often used as an umbrella term for both HIV Counseling and Testing (HCT). It is significant that people test for HIV in order to know their status; however, limitations in understanding factors that determine whether an individual will test or not poses a critical challenge. In order to mitigate HIV transmission, it is advisable that people make HIV testing a way of life.

According to WHO (2009), a survey undertaken of a general population in 12 high-burden countries in sub-Saharan Africa indicate a median of just 12 % of men and 10% of women who tested for HIV and received their results. The counseling that is provided enables individuals to make informed decision about being tested for HIV (WHO/UNAIDS/UNICEF, 2011). Such a decision can be influenced by several individual factors such as recurrent or chronic illness, when people are planning to get married or when they are planning a family, when a partner or a child dies and when people are worried or suspicious about a partner's behavior (AIDSMark, 2009). It is worth further mention that people attach importance to testing for different reasons, for instance, some people would seek regular testing depending on the behavior risk they engage in, such as engaging in sexual intercourse without a condom, or being exposed to health care procedures in a case of health care professionals (Booyesen, 2003). Regardless, the importance of HCT services cannot be left without being emphasised. HCT is therefore widely acknowledged and advocated as a primary strategy for both HIV prevention and provision of antiretroviral treatment (ART), care and support. Despite it being regarded as a gateway to a continuum of care, as well as it being a normal way to de-stigmatize HIV (De Cock, 2006) the environment, reports indicate that the global usage of HCT services is very low (WHO/UNAIDS, 2001). Based on the existing data and evidence, there is currently a consensus about the efficacy and cost-effectiveness of HCT intervention for HIV prevention and care. HCT has become or is being advocated as a major component of any comprehensive national as well as organizational AIDS mitigation strategy in many countries.

The workplace has embraced this initiative in an effort to mitigate the scourge in order to sustain the workforce since it has not been spared from the HIV epidemic. Seeking an HIV test in the workplace is regarded as preventative behaviour in that it creates an opportunity for employees to gain knowledge of their HIV status, access counseling, care and support services; and can help in accepting one's HIV status, coping and improving the quality of life of those employees who test positive; lead to informed decision making and increased motivation to prevent HIV transmission. It also provide employees with the opportunity to take appropriate actions such as remaining HIV-negative, and/or starting treatment, and lastly, helping to combat stigma and discrimination in the workplace. Despite these benefits, HCT services uptake within the workplace remains low and on the other hand HIV infections continue to increase (SABCOHA, 2004).

#### **1.1.1 The Global Perspective on HIV Epidemic**

HIV is the name of the virus that causes AIDS. The virus interferes with the immune system and leaves the body vulnerable to a variety of life-threatening infections and cancers (WHO, 2001). Since its discovery more than 30 years ago, HIV and AIDS remains a global crisis with its burden continuing to vary considerably between countries and regions (UNAIDS, 2012). The same report estimated 34 million people to be living with HIV and AIDS at the end of 2011. Of these, 5 million were young people, 3 million were women (UNICEF/UNAIDS, 2001), and approximately 2.1 million were adolescents between the ages of 10 and 19 (WHO/UNAIDS, 2012). Sub-Saharan Africa remains severely affected, and the epidemic continues to spread affecting the economically active part of society (UNAIDS, 2010). This report estimated that 890 000 young and productive people aged 15-24 were newly infected with HIV in 2009, and 640 800 were women. In the same year, global estimation of adults aged 15-49 years living with HIV was 0.8%; sub-Saharan Africa was leading with nearly one in 20 adults (4.9%) living with HIV. This accounts to 69% of global estimation. The regional HIV prevalence in this area was 25 times higher than in Asia, with a combined 5 million people living with HIV and AIDS in South, South-East and East Asia. Apart from sub-Saharan Africa, regions mostly affected second to this region and making 1.0% of adult population living with HIV and AIDS are the Caribbean, Eastern Europe and Central Asia (UNAIDS, 2012).

### **1.1 2 South African Perspective of HIV Epidemic**

South Africa is one of the countries in sub-Saharan Africa that remains severely affected by a generalized HIV epidemic; driven largely by unprotected sexual intercourse and mother-to-child-transmission (DoH, 2007). On a global scale, South Africa hosts the largest number of people living with HIV and AIDS (PLWHA) with intergenerational sex, multiple concurrent partners, low condom use, excessive use of alcohol and low rates of male circumcision as drivers of HIV epidemic (National Antenatal Sero-prevalence Survey, 2011). In 2010, the National Antenatal Sentinel HIV and Syphilis Prevalence estimated that 17.9% of adult population is living with HIV and AIDS. The same report estimates this percentage to be 5.63 million PLWHA with HIV prevalence differing across age groups, gender, geographical areas and socio-economic status. Of this number 3.3 million are women and 334 000 children (Department of Health, 2011). A stabilized 30% HIV prevalence among pregnant women was noted (National Antenatal Sentinel HIV and Syphilis Prevalence, 2010). It is therefore worth mentioning that the HIV epidemic continues by far to be the biggest killer of South Africans (DoH, 2007). In 2010 for instance, 43% of South Africans who died over 280 000 were killed by AIDS-related conditions (South African News, 2011). The introduction of effective combination antiretroviral drugs therapy (ART) in the early 1990s, culminated to 1.6 million South Africans being on ART programme to date (DoH 2012). Although there is much progress with the provision of universal access to ART, so is the increase in the number of people who are infected with HIV (UNAIDS, 2008, 2010). The same reports indicate that for every two people started on ART, five become infected with HIV. According to Statistics South Africa (2012), 5.3 million South Africans were living with HIV and AIDS. The report further indicated that 300 000 were newly infected and also projected a rise in new infections with approximately 200 000 AIDS-related deaths in 2013.

### **1.1.3 HCT and the High rate of HIV infections**

According to HSRC Household survey (2005), approximately 66 % of South Africans do not perceive themselves to be at risk of HIV infection.

Based on the country's alarming infection rates, it is therefore significant to advocate and encourage people to test to be able to know their HIV status so as to take necessary steps as early as possible. Despite the fact that HCT has since remain widely regarded as a key component of both HIV prevention, treatment and care (Morin, Khumalo-Sokutukwa, Charlebois, Routh, Fritz, Lane, Vaki, Fiamma, & Coates, 2006) only 10% of the global population who need testing can access the services (WHO 2002). The South African government for instance, established over 450 HCT centres and more than 800 counselors (Shisana, 2002, NSP, 2007; National HCT Guidelines, 2011). Research has shown that HCT has the ability to act as risk behaviour assessment, provide an education forum and that it is cost effective as compared with other strongly resourced dependent programmes (Morin et al., 2006). Included in the HCT drive, and complimented by the commitment of increasing ART accessibility, is the fact that HCT is able to provide appropriate and timely referral to newly diagnosed individuals (WHO, 2000). It should be noted that because sexual intercourse is reported to be the main mode of HIV transmission in South Africa, individuals are therefore assumed to act in their own self-interest to learn their HIV status and change their sexual behavior. This has been one of the driving elements in encouraging people to test for HIV (South African Medical Journal, 2007, pp. 263-280). Although most South Africans are aware that HCT services are available, only one in five people in South Africa who know about HCT have been tested for HIV (UNAIDS, 2012). In addition, despite surveys that showed high proportions reporting that they would like to be tested for HIV, few people have utilized the available testing services (Campbell and Williams, 1996). Campbell further asserts that seropositive individuals are often unaware that they are HIV-positive. This means that most people living with HIV get testing and counseling only when they already have advanced clinical disease (DoH, 2000) Reports have shown that despite the availability and advocacy of these HCT services, utilization has been low.

A randomized trial conducted by Metcalf, Douglas, Malotte, Cross, Dillon, Paul, Padilla, Brooke, Lindsey, Byers & Peterman (2005) on HCT uptake established that non-receipt of results was reduced with rapid HIV testing; however, there was little effect on uptake with indications such as pregnancy and Sexually Transmitted Infections (STIs).



Fylkesnes and Siziya (2004) conducted research on community HCT and established a significant increase in HCT uptake in Zambia by home-based delivery of results and counseling. It is worth mentioning that people with undiagnosed HIV are far likely to become seriously ill, and are ten times more likely to be affected by the effects of AIDS-related illnesses. The debilitating effects of the HI virus do not only impact on individuals, most aspects of society like the family, community and business are significantly impacted.

#### **1.1.4 The impact of HIV Epidemic on Business**

HIV and AIDS has undoubtedly featured in every organizational world and has had direct and indirect impact (SABCOHA, 2009); the greater segment of working population is deeply and passively affected by HIV epidemic (UNAIDS, 2010); posing a serious threat to economic growth, development and poverty alleviation (Booyesen, 2010). The virus depletes the normal functioning of the immune system; and hence an infected individual become susceptible to bacteria and viruses (HSRC, 2002,). Of particular concern according to UNAIDS (2001a) and Dickinson (2004), is the fact that despite this dilemma, in the early 1990s, the South African business was slow in stepping up to the challenge of taking action against the epidemic in as far as prevention, treatment, care and support is concerned. Harrison, Smith and Myer (2000); Barnett and Whiteside (2002) and Campbell (2003) postulate that HIV and AIDS challenge was initially perceived more as a medical rather than a business and economic issue. It emerged that business was feeling the brunt in terms of markets, investor confidence, workforces and skills they embody (Barnett and Whiteside, 2002, Clarke and Strachean, 2000, ILO 2000, Rosen, Simon, Thea and Vincent 2000, UNAIDS 2000 and Whiteside and Sunter, 2000); and the national economy as a whole (SABCOHA, 2010). According to the World Health Organization (2009), 57 countries, mostly from Africa and Asia experienced severe workforce crisis. Several critical areas within the workplace that are impacted include, productivity, increased costs of employee benefits, workplace morale due to prolonged staff ill-health with subsequent increased absenteeism and mortality rates (WHO/UNAIDS, 2008).

In 2009, the crippling effects of HIV and AIDS had created a massive gap and the World Health Organization estimated that 2 million health service providers and 1.8 million management support workers were needed to fill the gap. The thought of contracting HIV is therefore frightening for several good reasons, there is no treatment to cure the disease as yet, it spreads quickly infecting many people, most of them unknowingly and more so, there is no available vaccine to protect against it, meaning that the HIV epidemic will still be with us for the foreseeable future. (Steve and Femi, 2007). The complexity of AIDS epidemic continues to impose challenges on numerous efforts already put in place within most businesses. This has become a major issue for employers since there are still too many people being newly infected with HIV (UNAIDS, 2012). Facing these challenging consequences, many South African businesses focused their mitigation strategies towards sustaining the health and wellbeing of their workforce. They developed the workplace HIV and AIDS policies and programmes that include HIV testing as a key prevention strategy, Antiretroviral Treatment (ART) Programme, Disease Management Programme (Fraser, Grant, Mwanza and Naidoo, 2002; SABCOHA, 2002) for employees and their family members as a comprehensive and holistic approach to HIV management (The South African Bureau for Economic Research, 2006, 2010). Responding to such initiatives, the South African Coalition on HIV and AIDS (SABCOHA) established a community fund in 2010 availing HCT services to vulnerable employees and industries, including their families and the broader communities (SABCOHA, 2011). In so doing, business did not only reduce costs in the long run, but influenced the lives of those in their care positively. However, research evidence indicates that employee participation in HCT campaigns is very rarely 100 percent. In most cases HCT uptake accounts to 25 to 40 percent of the employee workforce (Metropolitan Life Insurance, 2006). The testing results are often subjected to selection bias under these circumstances, for instance, those employees who regard themselves to be at high risk of HIV infection and those who know that they are HIV positive may not want to participate (Metropolitan Life Insurance, 2006).

Apart from these factors, several other influential factors have been cited to impact on HCT uptake in the workplace, mostly those that stems from behavioural attitudes, perceptions around the disease and HCT services, cultural norms and practices, workplace policies and HIV

management programmes to name a few (SABCOHA, 2009). In the more developed countries, an estimated 20-30% of individuals were seropositive in 2004 according to the basic statistics released by the Centre for Disease Control Prevention, Division for HIV and AIDS. Provision of HCT services, as further attested by Rogers (2004) are a measure of providing psychological support to those who seek the service, as well as being an opportunity of providing education and motivation to modify behaviour aimed at reducing the risk of contracting HIV infection. It is clearly indicative that workplace interventions are increasingly becoming a critical forum for prevention activities (Zellner and Ron, 2009); and that the efficacy of HCT services within this context cannot be undervalued (Morin et al, 2006).

#### 1.1.5 What is HCT?

HIV counseling and testing entails the provision of counseling to enable individuals who are sexually active or are thinking of becoming sexual active, couples and mothers who are pregnant to make an informed decision for being tested for HIV (UNAIDS, 2001, 2010). This confidential test does not test for AIDS, it confirms if an individual is HIV positive or negative (UNAIDS, 2011). The process is guided by five key components issued by the World Health Organization since the first HIV tests were developed in 1985 to ensure adherence, these include:

- Consent
- Confidentiality
- Counseling
- Correct test results
- Connection/linkage to prevention, treatment and care

Furthermore, the initiative should be provided within non-discriminatory environment which encourage open discussion with health care professionals; where pre and post-test counseling is facilitated (South African National HCT Guidelines, 2010).

The created conducive and educational environment promotes sustainable positive change in both the infected and uninfected (DoH, 2009).

For individuals with positive results, this provides an entry point to a continuum of care which includes reinforcement of prevention, referral for appropriate treatment, care and support services (NSP 2012-2016); while those who test negative receive education and are motivated to maintain their negative status (WHO; UNAIDS, 2002). Provision of HCT services also enables access to interventions that can prevent mother-to child transmission of HIV, prevent sexually transmitted infections, modify sexual behaviour as well as provide necessary interventions for HIV positive individuals to access services and treatment for Tuberculosis if applicable (WHO/UNAIDS, 2010). According to Baggaley and Oberzaucher (2002), knowledge of one's status further enables people to cope with HIV infection in a better way, live healthy lifestyles and hence plan for the future. Furthermore, communities are helped to cope and reduce the denial and stigma that surrounds HIV and AIDS and hence support for mobilization of appropriate responses is initiated (WHO/HIV, 2009).

#### **1.1.6 South African National HCT Campaign**

The South African government has in recent years increased the availability of HCT services in the medical facilities, non-medical facilities through mobile services, homes and workplaces and was coordinated by the Department of Health (DoH) and the South African National AIDS Council (SANAC). Included in this drive was the provision of information, education and mass mobilization, detection and management of sexually transmitted infections (STIs) as well as creating a conducive and open environment to dispel stigma associated with HIV and HIV testing. In order to achieve this goal, working together with social partners to promote open and healthy dialogue among communities and civil societies was of paramount importance. In addition, the focus was to increase the proportion of people (15-49 years) to access HCT services from 25% to 70 % (DoH, 2011) so that they could know their HIV status early. The government aimed at testing 15 million people from April 2010 until June 2011 through provider-initiated testing and counseling, also known as client-initiated counseling and testing, (National HIV Counseling and Testing Policy Guidelines, 2010).

Of this 15 million people targeted, 1.6 million or 11% was projected to test HIV-positive based on the national prevalence level of 11% at that time, the South African National AIDS Council

(SANAC, 2011). Results of this national HCT drive varied from province to province with the province of Mpumalanga leading with infection rates of 24%. Kwa-Zulu Natal was about 22%; Gauteng was the third largest with low HIV positive results in terms of people who tested at Eastern Cape, Limpopo, Western Cape and Northern Cape (DoH, 2011). Preliminary report of the HCT campaign conducted in 2010 indicates that more than 12 million or 85% of South Africans were tested in just over a year in the national HCT campaign. From this number, 1.7 million or 18% of those who tested were found to be HIV positive (National HCT Guidelines, 2010). The refusal of the remaining 15% who were offered HIV testing but did not accept it can be attributed to quality of HCT service, the long queues and the time taken to complete the process which took about 30-45 minutes, fear of receiving the results (people were afraid to know their results); while others were not ready to test and hence exercised their rights not to take the test (SANAC, 2011). It was concerning though that people chose not to test for HIV despite the alarming increase in infection rates in South Africa because whether the test come out negative or positive there are steps that can be taken to protect and preserve one's health. Since the major HCT drive, the country's life expectancy improved (DoH, 2012). However, despite this improvement, the country is having 10% of infected people with 1000 people infected every day (NSP, 2012-2016). It is worth mentioning that the need to intensify and invest significant prevention resources in HIV counseling and testing forms one of the top priorities of both the South African government and business world (DoH, 2012). The revised national response according to the South African National Strategic Plan for HIV&AIDS and STIs (2012-2016) that informs this priority area is the reduction in the number of new HIV infections by 50% through continued HCT service provision as a driving force.

#### **1.1.7 HCT Programme within IDC**

Employees are critical to the success of every business and since HIV and AIDS is a disease that has no racial, gender or class boundaries, IDC has recognized since 2002 the impact of HIV and AIDS pandemic on the wellbeing of its employees and its business.

Management therefore committed itself and approved the formal management of the disease in a pro-active and comprehensive manner. This, the Corporation achieved by approving the HIV

Policy that paved the way for the provision of accessible and acceptable quality HIV and AIDS management programmes to all IDC employees in a conducive, fair, sound and non-discriminatory environment. Engagement and participatory initiatives are driven and managed through the strategic pillars (objectives) of IDC HIV & AIDS and STI Strategic Plan as aligned to the National HIV and AIDS Strategic Guidelines and positioned as management accountability and Human Resources responsibility, in all spheres of IDC business. This, the Corporation achieve by positioning its employee value proposition in its balanced entirety, aiming at reaching optimum performance and well-being. The scope of the IDC HIV and AIDS Strategy in the period 2012-2016 is the reinforcement of the awareness and education drive, the optimization of the prevention strategy through promotion and coordination of HCT Programme. This also includes free condom dispensing, behavioural modification through awareness and educational campaigns and the enhancement of the support and care, which entail: provision of treatment, care and support management through the company's medical aid and the Employee Wellness programme. Medical and clinical expertise when treating and managing HIV-positive employees forms the integral part of the IDC HIV and AIDS programme in consultation with the IDC Medical Aid. Central to the promotion of HCT programme is the commitment of treating HIV like any other life-threatening (Chronic) diseases and as such, HIV positive employees are governed by similar contractual obligations as all other employees.

Principles such as informed consent, pre and post-test counseling, privacy and confidentiality form part of the testing process. Through the services of the company's medical aid, HIV testing is provided once a year during the wellness day which is marketed well in advance to promote attendance and is held at the auditorium within IDC. The service is provided by health care professionals and principles of testing are always observed and maintained. It should be mentioned though that from the way the HCT programme is conducted within IDC, testing for HIV is not combined with the other normal basic tests such as tests for blood glucose, cholesterol, blood grouping, blood donation which form part of activities for the event. No internal employees are involved in the process of testing except for marketing and organizing the event.

All matters related to testing, counseling, handling of results and reporting is done by an external service provider in conjunction with the medical aid. All reports are forwarded to the Wellness

Specialist, who is a professional-nurse and practicing within the principled conduct of her profession, one of which is ensuring confidentiality. These results are kept in a locked cupboard and the wellness specialist is the only person who is able to access the records. Regarding the issue of privacy, in the auditorium where testing is conducted, private rooms are used where participants are attended on an individual basis. All employees are invited to attend, and following are reports of attendance for 2011 and 2012 respectively indicating gender and race groups.

#### 1.1.7.1 HCT report for 2011-gender

2011 HCT report on gender is presented in the table below.

**Table 1.1:** HCT report-for 2011-gender.

Year		Total employees	Total employees tested	Tested %
2011	Females	336	75	23.7
	Males	316	43	12.8
<b>Total</b>		<b>652</b>	<b>118</b>	<b>18.1</b>

The report indicates that females dominated as they represented 23.7% as compared to 12.8% of males (Table 1.1 in paragraph 1.1.7.1 above).

#### 1.1.7.2 HCT report for 2011- race

2011 HCT report on race is presented in a table below.

**Table 1.2:** HCT report-for 2011-race

Race	Total Employees	Tested	Tested %
African	399	88	22.1
Asian	63	7	11.1
Coloured	43	10	23.3
White	147	13	8.8
<b>Total</b>	<b>652</b>	<b>118</b>	<b>18.1</b>

From the attendance report, it can be noted that Coloureds were more with 23.3%, followed by Africans with 22.1%, Asians represented 11.1% and Whites attendance was 8.8% (Table 1.2 in paragraph 1.1.7.2 above).

#### 1.1.7.3 HCT report for 2012- gender

2012 HCT report on gender is presented in a table below

**Table 1.3:** HCT report for 2011- gender

Year	Gender	Total employees	Total employees tested	Tested %
2012	Females	412	50	12.1
	Males	403	36	8.9
<b>Total</b>		<b>815</b>	<b>86</b>	<b>10.6</b>

It can be noted from the report that females attended in more numbers (12.1%) than males (8.9%) (Table 1.3 in paragraph 1.1.7.3 above).

#### 1.1.7.4 HCT report for 2012- race

2012 HCT report on race is presented in a table below

**Table 1.4:** HCT report for 2012-race

Race	Total Employees	Tested	Tested %
African	506	67	13.2
Asian	74	8	10.8
Coloured	67	3	4.5
White	168	8	4.8
<b>Total</b>	<b>815</b>	<b>86</b>	<b>10.6</b>

The report indicates that Africans dominated with 13.2%, followed by Asians with 10.8; Whites were represented with 4.8% and lastly, 4.5% represented Coloureds (Table 1.4 in paragraph 1.1.7.4 above). Despite the provision of HCT services within the IDC environment as well as given the increasing focus on the importance of HCT, the upatake remains low.



The 2012 HCT attendance report indicates a decline in attendance rate by 7.5% as compared to the 2011 attendance report. This study will therefore investigate the factors that prevent HCT uptake within the Industrial Development Corporation (IDC) in Johannesburg, South Africa.

## 1.2 **Research Problem**

HCT amongst others is essential in decreasing high rates of Sexually Transmitted Infections (STIs), reducing high-risk sexual practices and also serve as a direct link of HIV infected people to Highly Active Antiretroviral Therapy (HAART), which, the South African government has since rolled out tremendously. However, despite the potential benefits associated with HCT programme, including the availability of such programmes within the workplace, utilization uptake has been low (WHO, 2003). Similarly, at IDC, where the researcher is responsible for the provision of health promotion programmes, uptake of HCT programme has been low. In addition, despite the fact that HCT programme forms one of the prevention components included in the institution's health promotion programme offered for employees, participation rate remains low. It is assumed that several possible contributory factors could play a major role in preventing the uptake of HCT programme. Thus, the study seeks to answer the research questions posed in the next paragraph.

## 1.3 **Research question**

The research questions for this study were the following:

- 1.3.1 Does fear of learning about one's HIV status contribute to low HCT uptake?
- 1.3.2 Does HIV-related stigma and discrimination contribute to low HCT uptake?
- 1.3.3 Does knowledge of and attitudes towards HIV testing contribute to low HCT uptake?

The following hypotheses will be tested:

- Hypothesis 1: Fear of learning about one's HIV status contributed to low HCT uptake.
- Hypothesis 2: HIV-related stigma and discrimination contribute to low HCT uptake
- Hypothesis 3: Knowledge of and attitudes towards HIV testing contribute to low HCT uptake

Research evidence indicates that the success and maximum utilization of workplace HIV counseling and testing programme is influenced by several variables. For the purpose of this research study, fear of testing for HIV, stigma and the associated discrimination surrounding HIV and AIDS as well as knowledge of and attitudes towards HCT forms part of the variables to be tested in the study to determine if these variables prevent the HCT programme uptake within IDC.

People who are seen to have presented to undertake HCT risk the potential of being perceived as sick or HIV-positive. This further translates to potential consequences that have negative effects on the health of the tester. Similarly, this may have influence on the people's willingness to present for testing due to fear of being stigmatized (Setswe, Wabiri, Seager and Peltzer, 2009). The nature of social interaction within the work place is such that gossip is easily spread, and therefore, stigma associated with the capabilities of employees who are HIV-positive to fulfill their roles including casual contact with other colleagues most often results in social isolation. In this regard, workplace HIV disclosure becomes a challenge for fear of verbal abuse in some instances (Purlwitz, MacQuarrie, Nyblade, Kwesigabo, Jain, Kajula and Phillip, 2010).

#### 1.4 **Aim**

The aim of the study is to identify factors preventing uptake of HCT programme in order to make recommendations that would improve the uptake rate.

#### 1.5 **Objectives**

The objectives of the study were to:

- analyze the current HCT programme
- determine employees' levels of knowledge on and attitudes towards HCT
- determine employees' perceptions on HIV and AIDS and HCT
- identify employees' reasons for using or not using the HCT programme.

## 1.6 Significance of the study

Testing for HIV is the gateway for prevention, treatment and care (UNAIDS/WHO, 2004). Therefore, in order to scale up prevention and access to ART, both the volume of testing as well as the ability to provide counseling to those who have tested require rapid increase (UNAIDS, 2007). Furthermore, given the epidemiological situation in South Africa, and the fact that the disease mostly affects people of the working age with devastating effects on the business economy, the researcher seeks to identify factors that impede as well as those that contribute to increased HCT uptake in the workplace. Having gathered this information, it will form the basis on which the recommendations can be implemented in an endeavor to increase the HCT uptake.

The main focus is on prevention of new infections, a significant factor that forms part of the South African National HIV and AIDS Prevention Strategy. Therefore, the researcher is of the view that all sectors of society should join hands in mitigating the scourge. In this regard, the study will contribute, show support and partnership to the National HCT drive spearheaded by the President of South Africa and the Minister of Health as custodians who encourage South Africans to test for HIV regularly. Additionally, the research will also contribute to the body of knowledge by adding valuable information needed to drive HCT uptake. Of significance is the fact that the research process will act as an awareness and educational platform, for instance, when requesting permission to conduct the study and during the administration of the questionnaire. Employees would be sensitized about the concerns around HCT services, which may create an open dialogue around issues of HIV and AID. Talking openly about HIV and AIDS matters in the workplace would therefore, contribute to dispelling stigma associated with HIV and AIDS. The findings of the research would give direction for Management to address and adopt measures to rectify and strengthen the workplace HCT programme. The importance of testing will be re-emphasized, this, in itself, will be a driving force to encourage employees to make HIV testing a way of life, as well as displaying Management commitment and support as custodians of workplace health promotion programmes.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

Numerous research studies have been undertaken regarding HIV counseling and testing concentrating amongst others on the factors that prevent the uptake of this initiative. In terms of this study, factors such as fear of learning about one's HIV status, HIV-related stigma, knowledge of and attitudes towards HIV testing will be our focal point. Following will be a brief overview of prevention models in HIV and AIDS research, literature review of the study variables, the author's findings as well as their perspective on their studies.

### **2.2. Prevention models in HIV and AIDS Research**

HCT is globally recognized as an effective and significant strategy for both prevention and care (National AIDS Council Secretariat, 2000:27). There are three widely cited models that are assumed to constitute effective HIV prevention in the history of the HIV epidemic. These are information provision model, realistic model of behaviour change and prevention model based on decades of experience. Principles of these preventative models are briefly discussed below.

#### **2.2.1 Information provision model**

According to the proponents of Information Provision Model (Brown, DiClemente and Beausoleil, 1992), the lesson learned from the first and second decade of HIV prevention respectfully is that HIV was thought to be behaviourally transmitted, and prevention was therefore built around changing individual behaviour. Research evidence indicates that the early stages of the epidemic were based on information provision model. This model held the perception that informing people about how HIV is transmitted and how to protect themselves using condoms and testing for HIV for instance would influence behaviour change. This model was not successful since it was found that it only provided information alone without addressing risk and vulnerability.

### 2.2.2 Realistic model of behaviour

According to the proponents of this model (Brown et al., 1992), employees make informed decisions based on other factors such as the social, economic and cultural environment within which this behaviour occurs. A model of behaviour change in the second decade addressed risk and vulnerability. It advocated that with the use of condom for instance, behaviour could be influenced by external factors such as environmental as well as contextual issues. These could include past experience, social pressures (peers, family, colleagues, etc), risk perception (e.g. partner type), personal concerns and motivation to use condoms as prevention. In addition, condom usage can be influenced by external factors such as accessibility, skills to use them and partner willingness to use them.

### 2.2.3 Prevention model based on decades of experience

According to the proponents of this model (Brown et al., 1992), having an HIV test and finding out about one's HIV status can have considerable problems for the employee concerned. These include problems with coping, stigma, rejection and discrimination, and human rights abuse in the workplace. The setting wherein HCT is undertaken plays a vital role in contributing towards the achievement of an intended goal, that of changing behaviour. The behaviour change communication (BCC) interventions advocates several enabling factors that influence behaviour change through open channels of interpersonal or group communication in the workplace. These include providing effective communication, creating an enabling environment with policies, respecting human rights issues and providing user friendly services. This conducive environment would then create awareness, employees would then be concerned, be knowledgeable, be motivated to change and their behaviour would be modified and hence practice sustained behaviour change.

## 2.3 **Factors preventing HCT uptake**

A lot has been written on the factors that prevent HCT uptake. Following will be a brief overview of research studies conducted on the fear of learning about one's HIV status.

### 2.3.1 **Fear of learning about one's status**

Taking an HIV test can elicit emotional feelings associated with stress and fear; while it can also be a simple act like making a note in a diary for some especially with prior emotional readiness and informed decision. Based on the population survey conducted between 2004 and 2009 in three countries, namely Namibia, Zimbabwe and Kenya, the findings revealed that the thought of the real risk, nor matter how small, may be an eventual revelation of positive results; hence testing for HIV was found to be associated with feelings of extreme fear and despair (UNICAF/UNAIDS, 2004). The report further indicate participants expressing feelings of guilt and fear related to circumstances of the risk; for instance, consistent condom usage and not using it on one occasion, or having experienced a condom bust, first sexual experience at whatever age without using protection, engaging in new sexual experiences like anal penetration without using protection, engaging in a paid sex or paid for sex, experiencing sexual assault and if the risk emanated from a sexual experience outside of the main relationship which may involve having to change home sex life until results are available.

Furthermore, a study conducted in United Kingdom to determine barriers of HIV testing revealed that even though research has indicated a 99% of tests in a United Kingdom sexual health clinic being negative, participants expressed real and immense worry (WHO/UNAIDS, 2009). The ever increasing HIV infection rates especially in sub-Saharan Africa despite significant progress made in as far as the mitigation strategies are concerned is concerning, the fear of the unknown is therefore an area not to be taken for granted (UNAIDS, 2012). It should be mentioned though that it was scary in the early days where it was called AIDS.

In a qualitative study commissioned in 2000 and was repeated in 2009 by UNESCO to determine if knowledge, perceptions and fear influence the decision to test by Zimbabweans community at a Primary Health Clinic; the results revealed that the name was still associated with sin, immorality and death despite the current availability of a wealth of information on the subject (UNICEF/UNAIDS, 2000). The report further described how this dark period in the early days of HIV and AIDS left communities scathed, and hence the fear of the silent killer as it was called, also left unhealed scars on societal cultural memory; as such, the mere mention of HIV and AIDS still has a way of making people to stop conversations.

Testing for HIV is routine in most programmes provided for the prevention of mother-to-child transmission (PMTCT) of HIV worldwide, and this forms part of antenatal care in most government hospitals and clinics (UNAIDS, 2012). For instance, routine testing of all pregnant women in South Africa where HIV pandemic is alarmingly high was slightly fewer than 50% in 2005; and by 2009 the testing was virtually universal (Johnson and Birkham, 2012). In South Africa, among all women who attended routine antenatal care during 1990, 0.8% was found to be HIV positive and the number peaked up in 2010 to 30.2% (National Antenatal Sentinel HIV and Syphilis Prevalence Survey in South Africa, 2011). A study was conducted in South Africa, KwaZulu-Natal province in 2009, a province that was leading with HIV prevalence in the early 2000 and still is among the leading with HIV positive pregnant women (DoH, 2010). The results of this study revealed that most women were afraid to test because they have witnessed or heard that other women were being physically abused and chased away by their husbands after testing HIV positive. As a result, most of them visited antenatal clinics at a relatively advanced stage of their pregnancy; fewer than 40% of them attended the first time before 20 weeks gestation; while most women went into labour without attending antenatal clinic at all (WHO/UNICEF/DoH, 2010). Subsequently, the study revealed that the proportion of the estimated number of infants exposed to HIV who were tested before reaching the age 2 months between 2008 and 2010 increased from 36% to 70%; while an estimated 70.4% of maternal deaths in South Africa were HIV-related (DoH, 2012).

However, Johnson and Birkham (2012) postulates that over the same period in 2011, the proportion of infants tested HIV-positive decreased from 9.6% to 2.8% due to improved measures on PMTCT provision. A study conducted in Kenya's Western Nyanza Province in 2009 on the other hand, found that fear of an HIV diagnosis and how to deal with its consequences were reasons women in that region did not attend antenatal care.

### 2.3.2 HIV-related stigma and discrimination

Several studies both qualitative and quantitative have been undertaken since HIV was diagnosed in the early 1980s; and most findings have emerged to convincingly support the hypothesis that stigma prevent access to testing services, antiretroviral (ARV) and adherence thereof. This can be attested by the fact that stigma and discrimination present major challenges to the successful implementation of workplace HIV and AIDS programs especially the prevention strategies (Steward, 2009). Even though the words stigma and discrimination are often used interchangeably, their meanings do differ. UNAIDS (2002) describes stigma as an attribute or quality which "significantly discredits" an individual in the eyes of others. Furthermore, it is a social process that marginalizes and labels those who are different and these produce and reproduce relations of power and control MacQuarrie, Nyblade and Kwesigabo (2009). Based on this, stigma was cited as a primary barrier of seeking voluntary counseling and testing (VCT) services (Wolfe, Weiser, Leiter, Steward, Percy-de Korte, Phalatse, Lalopino and Heisler, 2007)

A related finding from qualitative studies on the context of prevention of mother-to-child transmission services in Malawi and South Africa is that fear of stigma and discrimination, along with fear of household conflict, divorce, and lack of support from husbands, was often cited as a reason for women dropping out following their initial antenatal clinic visit (Bwirire, Fitzgerald, Zachariah, Chakafa and Massaguoi, 2009; Varga and Brookes, 2010). Stigma emerged spontaneously as the second most frequently listed reason why women do not begin ART in a qualitative study in Zambia (Murphy, Austin and Greenwell, 2001; 2002a).



This study also found out that stigma and discrimination present barriers to good adherence to anti-retroviral therapy (ART). The PMTCT study conducted in Kenya's province of Nyanza in 2009 cited that stigma, discrimination and violence were reasons that contributed to 80% of participants not returning for follow-up counseling regardless of their HIV status; 95% did not disclose their HIV positive status to their spouses and relatives. Discrimination on the other hand, focuses on behaviour: the "unjustifiably different treatment given to different people or groups" (Donnelly, 2002). Discrimination further involves negative practices that stem from stigma; and the root source of HIV and AIDS stigma is believed to be from fear and moral judgment (WHO/UNAIDS, 2010). Employees who are living with HIV may be afforded differential treatment within the workplace resulting with negative outcomes (SABCOHA, 2009). The study conducted by Metropolitan Life Insurance (2006) revealed that these discriminatory practices include pre-employment HIV testing, denial of employment if they test positive, harassment, domination, oppression, the exercise of power or control, accusation, ridicule, or resentment and finally, employees expressed feelings of pressure to resign. Furthermore, the study found employees expressing blamefulness, feelings of guilt, hopelessness, fearing living with the disease or imminent death. It therefore paves the way for the epidemic to go underground, creating an ideal condition for HIV to spread. The study concluded that these may cause employees who are living with HIV and AIDS to experience a range of self-protection behaviours, such as deciding not to disclose their HIV status or not to access healthcare services such as HIV testing, thus having a profound effect on prevention, treatment and care.

Similar study conducted by SABCOHA (2003) revealed that HIV-related stigma is related to moral judgments, for instance it was found that employees who are HIV-positive may be viewed as either "guilty" or "innocent" in terms of how they contracted HIV. As a result, the same study found that such thinking allocates gossip, rumors, blame and punishment, dismisses employees who are positive as "promiscuous", "sinful", "irresponsible", deserving punishment; and these allows discrimination to appear as justifiable. External stigma (enacted) refers to the actual experiences of discrimination (UNAIDS, 2002).

Based on a study on the traditional beliefs about the cause of AIDS-related stigma conducted in 2003 and repeated in 2009 in a black township in Cape Town South Africa, the findings revealed that compared to people who had been tested, individuals who were not tested for HIV demonstrated significantly greater AIDS related stigmas; ascribing greater shame, guilt and social disapproval to people living with HIV and AIDS (PLWHA). To most participants in the study, perceptions on HCT were accompanied by an epidemic of fear, ignorance and denial. Knowing test results among those tested was not related to stigmatizing beliefs (Kalichman and Simbayi, 2003). The study conducted by Skinner (2002), reveals that stigma also introduces a desire not to know about one's own HIV status, thus delays testing and access of treatment. Similarly MacQuarrie et al., (2009), postulated that stigma and discrimination represent obstacles such as preventing individuals from being tested; preventing persons from recognizing that they or family members are HIV positive; inhibiting people from seeking care, support, and treatment; causing people to mislead others; impeding people from using protection in intimate relations; increasing social inequities; hindering the access of people living with HIV to housing, education, employment.

### **2.3.3 Knowledge of and attitudes towards HCT**

A substantial body of literature postulate interesting findings around the relationship between HIV knowledge and attitudes towards HCT, for instance, results cited in the 2011 Demographic Health Survey (DHS) indicate that more than half of young people aged 15-24 years have comprehensive knowledge about AIDS and HCT; similarly the age group 15-49 years, which is the most productive segment of the working population have considerable knowledge and in both age groups, the infection rates are alarmingly high; the findings does however illustrate a clear interpretation that knowledge does not necessarily translate into action. Cited in a randomized study on HCT and HIV conducted by Pelzer, Matseke, Nzolo and Majaja (2009) is the fact that education and access to HIV testing services being the contributory factors to low HCT uptake and therefore both areas necessarily need improvement.

Kalichman and Simbayi (2003) further postulates that socio-economic factors such as age, marital status, educational level, occupation, household wealth and area of residence are contributory factors to low HCT uptake. Gibb, MacDonagh, Gupta, Tookey and Peckham (1998) on the other hand, their observational study found that convenience, direct offer of testing and positive attitude of professionals offering HIV testing have a critical impact on HCT uptake. HSRC (2002) included race, religion and culture in the HCT uptake study and establish that these factors do influence participation rate.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter describes the research setting, research design, target population, sampling method, data collection, measuring instrument, ethical considerations, pilot study, scope of the study, assumption of the study and limitations to the study.

### **3.2 Research setting**

The research was conducted at the Industrial Development Corporation (IDC), a state owned institution situated in one of the affluent areas of the city of Johannesburg, South Africa. IDC was established in 1940 as a national development finance institution set up to promote and contribute to the creation of balanced, sustainable economic growth and industrial development for the benefit of South Africa and the rest of the African continent. The Corporation identifies and support opportunities not addressed by the market, provide risk capital in partnership with the private and public sector. It has a staff compliment of 834 currently, of which 784 is located at the head office in Johannesburg where the research was conducted; and 50 staff members are located in different regional offices around the country. A professional environment with employees' work experience and qualifications ranging from newly qualified matriculants (for learnership programme) and those with post graduate degrees working in different departments. The vast diversity of this population in terms of socio-demographic characteristics and other related variables enabled this study a huge undertaking. It was therefore necessary to delimit the study setting from which the sample for the study was drawn, that is, all employees at this workplace setting were legible for the study. The setting provided a confined geographical area where employees were available from 08:30 until 16:00 on the day of the institution's wellness day when the information sheets, consent forms and questionnaires were distributed to facilitate the collection of data.

### 3.3 Research design

The research design outlines the plan or strategy that specifies the procedure used in seeking answers to the research questions (Christensen, Johnson and Turner, 2011). A descriptive cross-sectional survey was used, thus a quantitative approach; what Christensen et al. (2011:29) describes as “research based on data”. A descriptive survey enables accurate portrayal of individual, event or group characteristics in real life situation for the purpose of describing what exists, determining the frequency with which something occurs and categorizing information (Burns and Grove, 2001:44). Furthermore, it is the best method of collecting original data, offering precise measurement and data collected are in a form of numbers and statistics (Jenkins, 2009). It also describes what people see and examines the relationship between variables enabling the researcher to be provided with baseline information (Christensen et al., 2011).

For this study questionnaires included questions that would enable the stated hypothesis to be tested and respondents would freely provide information required on the questionnaire without being controlled. Questions comprised of a bit of control measure through closed questions (yes/no options) prompting respondents to choose an option; while open-ended questions were left entirely on the respondents’ response and were completed anonymously. Respondents would not put their names on the questionnaire to ensure anonymity and confidentiality; however, a brief personal background would allow further analysis on whether respondents’ opinions were shaped or not. Christensen et al. (2011) asserts that three criteria need to be met in a research design. The first criterion is that the design should answer the research question and it should adequately test the hypothesis. In this study, the questionnaires were designed based on the hypothesis. The second criterion entails controlling extraneous variables, in which case this study applied by designing questions in such a manner that respondents use options to respond and that no rival hypothesis needed to be eliminated. The last criterion of a research design entails application of the study results to individual either than those who participated in the study. This study envisaged generalizing about the scope of the study beyond the boundaries of the actual study and that the results could be used in any workplace setting in South Africa.

### **3.4 Target Population**

Generally, a large collection of individuals or subjects which are the main focus of a scientific query is known as a research population (Jason, Osborne and Castello, 2004). Christensen et al. (2011) asserts that this well-defined collection of individuals share similar attributes or traits of interest to the researcher, whose results the researcher would like to generalize; and from which the sample will be drawn. For the purpose of this study, the researcher focused on IDC employees, a state owned institution in Johannesburg, South Africa. There are four main categories of employees, namely, Executives, Managers; employees on Professional Level and employees on Administrative Level. Population characteristics included both males and females of different races, ages, marital status, position, educational levels and work experience.

### **3.5 Sample and Sampling Procedure**

A subset of the population studied in a research is referred to as a sample (Christensen et al., 2011), and sampling is a process used to select appropriate number of subjects from a defined population (Kothari, 2004). A random sample of 60 employees was selected using probability random sampling. Christensen et al. (2011) describes this as being a method that ensures equal chance of employee selection. The completed questionnaires that were dropped back into a sealed box were 32 which made the final sample of seven males and 25 females.

### **3.6 Data collection**

Data was collected by distributing information sheets, consent forms and anonymous structured self-administered questionnaires written in English to capture relevant information based on the objectives of the study. The three documents were inserted in a sealed envelope and distributed to participants during the institution's wellness day. It took approximately 10-15 minutes for participants to complete the questionnaire and to ensure that a high proportion of questionnaires were returned, all completed questionnaires and signed consent forms were collected immediately after completion and dropped in a sealed box.

### **3.7 Measuring Instruments**

Devices used to collect data in a study are called measuring instruments (Christensen et al., 2011). In this study, the researcher firstly sought permission from the institution's Human Capital Divisional Executive to use the attendance report records of the previous two years (2011 and 2012) HCT conducted within the institution. This information together with in-depth literature review was used to design the questionnaire. A structured, self-administered questionnaire was selected simply because it requires less time and is less costly (Christensen et al., 2011). The questionnaire was prepared in English and since the environment is professional and employees have the command of English language, no provision was made to explain the questionnaire in different languages. The intentions of the researcher were made known to the participants prior to the distribution of questionnaires.

### **3.8 The Questionnaire Structure**

The questionnaire covered demographics such as age, gender, marital status, race, educational level, position, years of work experience of respondents and questions related to HIV and AIDS-related stigma and the associated discrimination; while the HCT-related information included knowledge of and attitudes towards HCT, fear of learning about their HIV status, participants' perceptions about their colleagues who are HIV positive, benefits of undertaking HCT, when last was HCT undertaken and where, reasons of undertaking HCT, if HCT services provided to them meet their needs, the professional conduct of health care professionals providing HCT, privacy and confidentiality measures. A five point Likert Scale provided scaled questions that assessed participants' attitudes towards HCT services. The responses included "Strongly agree – Agree – Disagree – Strongly disagree". Lastly, participants provided suggestions on how to better improve on the current HCT programme within IDC. After completion of the questionnaire each participant was requested to fold and put their completed questionnaires in a sealed box. Pre-testing of the questionnaire was undertaken in similar environment before the actual data collection took place to ensure relevance and clarity of questions.

Since participants did not experience any difficulty in completing the questionnaire, alterations were therefore not made on the questionnaire. Data gathered from the completed questionnaires was logged into the Statistical Package for Social Sciences (SPSS) for processing and data analysis was based on the processed results from which conclusions were drawn.

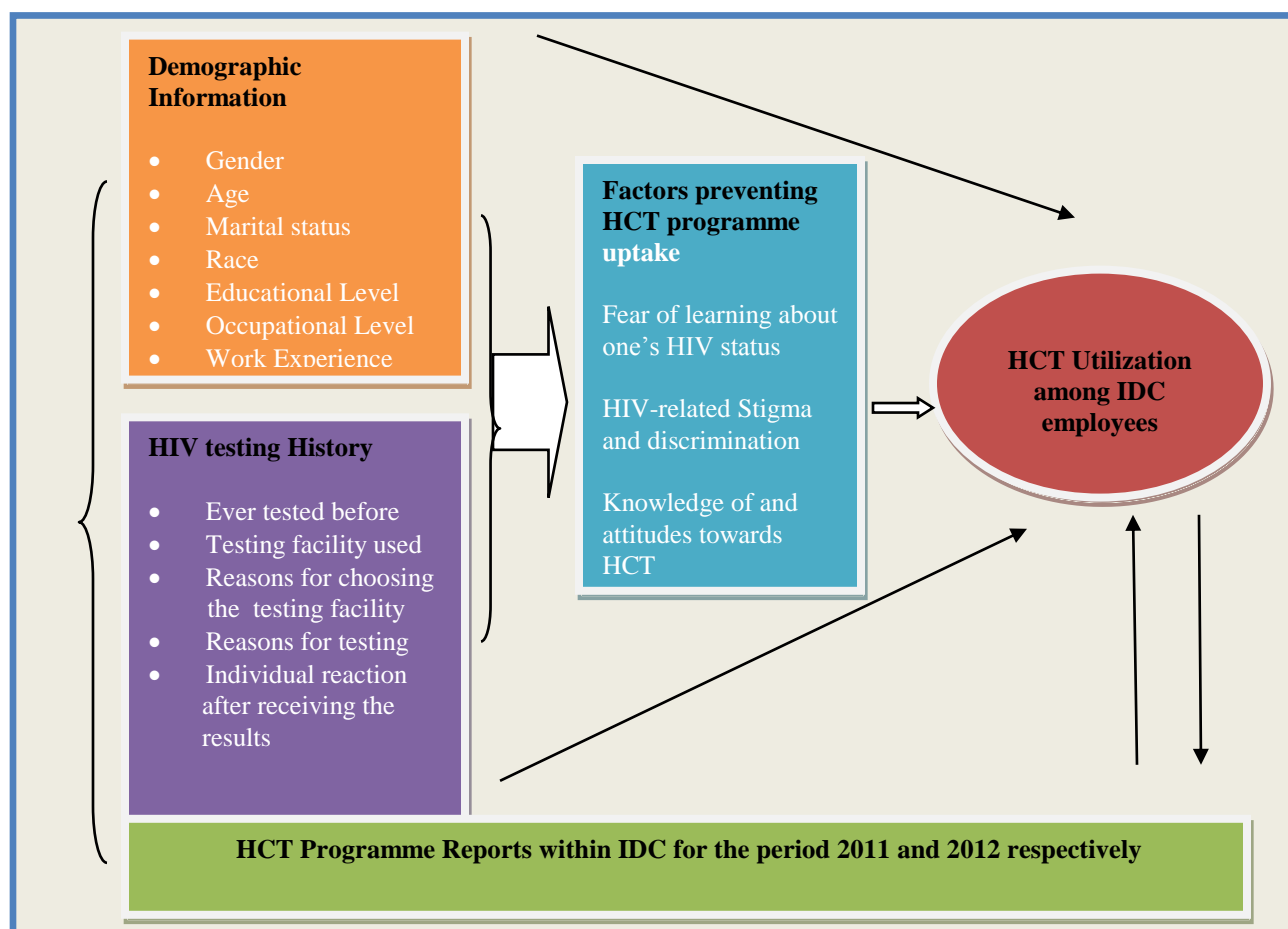
### **3.9 Ethical Consideration**

Permission to conduct the study in an official written form was sought by the researcher prior to commencement of the study. Upon approval, the intentions of the researcher, nature, purpose and significance of the study was made known to the participants. Indications were stated that the study is voluntary and that participants' right to withdraw from the study was to be respected without being penalized or victimized. Undue intrusion into participants' lives in the study area was avoided. Confidentiality to information and participants' anonymity was declared and maintained. Any potential limitations to confidentiality of given information was indicated to participants. Information linking participants to the study was avoided by not using participants' names on the questionnaire. Information covered included the demographics of participants, information from previous records of HCT attendance within IDC and literature review was used as a guide to develop questionnaires. Informed consent for voluntary participation was obtained before the completely anonymous self-administered questionnaire was distributed. When the researcher was certain that participants understood the aims and objectives of the study, they were requested to sign the informed consent before answering the questions. The results of the study were not distributed nor published for public consumption; however they will be submitted to the institution in order for the recommendations to be implemented.



## CHAPTER FOUR: RESULTS AND DISCUSSION

This chapter presents the results and various data representational techniques such as bar charts and tables. Discussion of results will also form part of this chapter; a comparative discussion of the 2011-2012 results of IDC HCT programme uptake will be included. Following is a suggested conceptual and analytical framework for investigating determinants of HCT programme uptake among IDC employees. Information on gender, age, marital status, race, educational level, occupational level, work experience, HIV testing history, fear of learning about one's status, stigma and discrimination, knowledge of and attitudes towards HCT and lastly, HCT programme uptake reports for 2011 and 2012 were included as independent variables; while HCT uptake was included as a dependent variable (Figure 4.1 below). The selection of these variables was dependent on the researcher's own hypotheses including information from previous literature findings from literature review.



**Figure 4.1:** Suggested conceptual and analytical framework for investigating determinants of

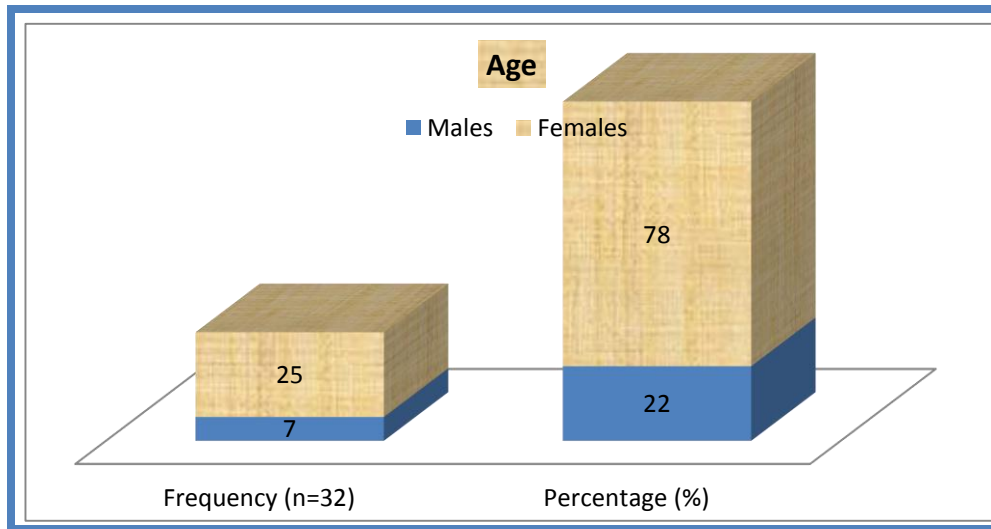
## HCT programme uptake among IDC employees in November 2013.

**4.1 Background demographic characteristics of study participants**

All participants were employees at the Industrial Development Corporation in Johannesburg, South Africa. Out of 60 questionnaires which were initially distributed, only 32 were completed and returned back; making the final sample of seven (22%) males and 25 (78%) females. No questionnaires were destroyed, yielding a response rate of 53.3%. The mean age of participants was 31 years, with a median age of 35 years. The younger age group (20-29 years) represented 34%; while the older age group 50+ years represented only 3% of the study participants. A high proportion of single participants accounted for 47%, married were around 44%, divorced 6% and widowed accounted for 3%. Within the occupational level, participants on Executives level were not represented and yet Administrators were in the majority with 56%. Africans who participated were 84.4%; while Asians and Coloureds represented 3.1% each.

It should be noted that information on the demographic determinants of testing comes from the studies undertaken on specific groups at risk (USAID, 2012). In low- HIV prevalence countries in the Northern Hemisphere for instance, primary attention was directed at men who have sex with men, migrants and intravenous drug users (USAID, 2009). On the African continent on the other hand, studies were undertaken in programmes of pregnant women as well as in high risk groups such as sex workers, truck drivers and mine workers (WHO, UNAIDS, 2010). The current study thus included the demographic characteristics of participants as other factors that were investigated to determine HCT programme uptake. The demographic characteristics of study participants are presented in bar graphs below including a brief discussion on each variable.

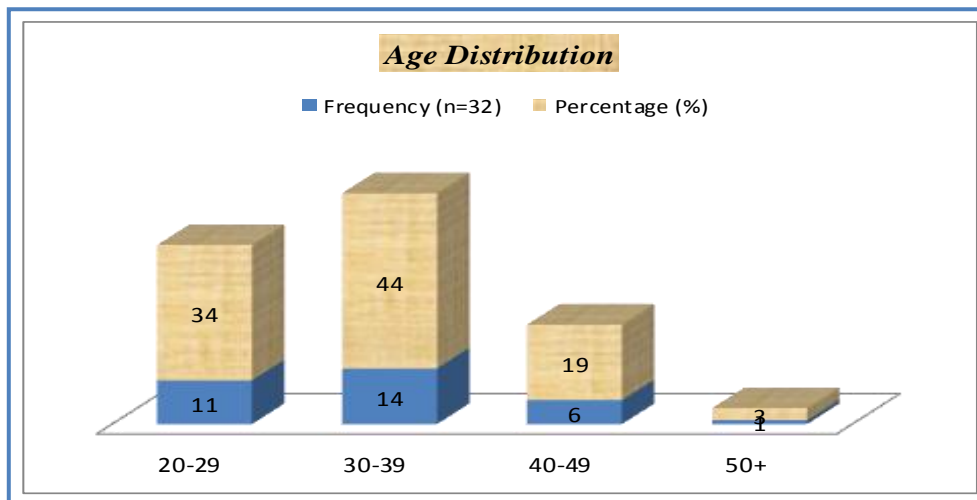
#### 4.1.1 Gender of participants



**Figure 4.2:** Gender distribution of participants.

The study established that (78%) of sampled population were females and (22%) represented males (Figure 4.2 in paragraph 4.1.1 above).

#### 4.1.2 Age of participants

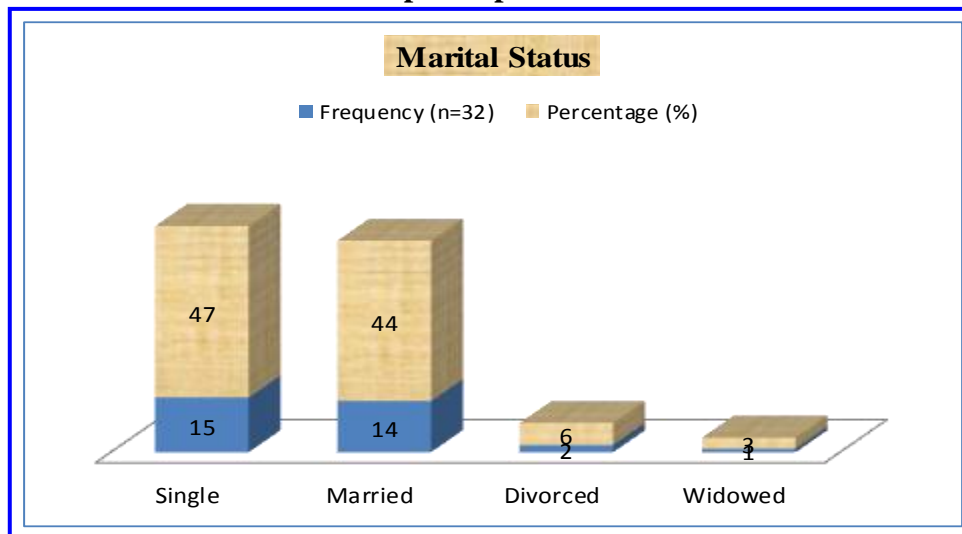


**Figure 4.3:** Age group distribution of participants.

In terms of age distribution, it was revealed in the study that the higher proportions that participated were in the age category 30-39 years and represented 44%, this was followed by the

age category 20-29 years with 34%, and the 40-49 years represented 19%; while the less proportion in the age category 50+years represented 3% (Figure 4.3 in paragraph 4.1.2 above).

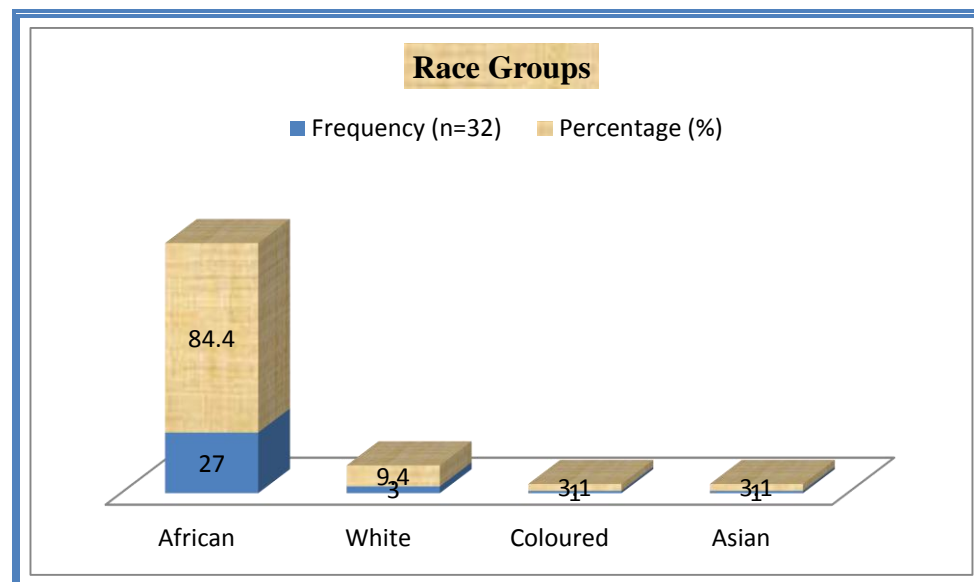
#### 4.1.3 Marital status of participants



**Figure: 4. 4:** Marital status of participants.

Single participants were dominantly represented with 47%; while married participants accounted for 44%, divorced and widowed participants accounted for 6% and 3% respectively (Figure 4.4 in paragraph 4.1.3 above).

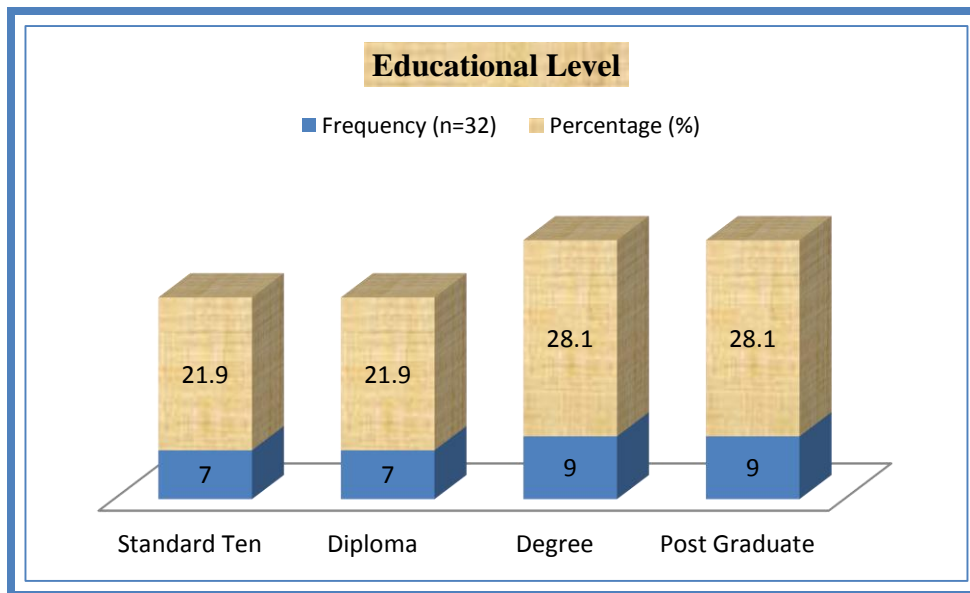
#### 4.1.4 Race of participants



**Figure 4.5** Race distribution of participants.

Africans were in the majority and leading with 84.4% representation, followed by 9.4% of Whites participants; while Indians and Coloureds each had 3.1% (Figure 4.5 in paragraph 4.1.4 above).

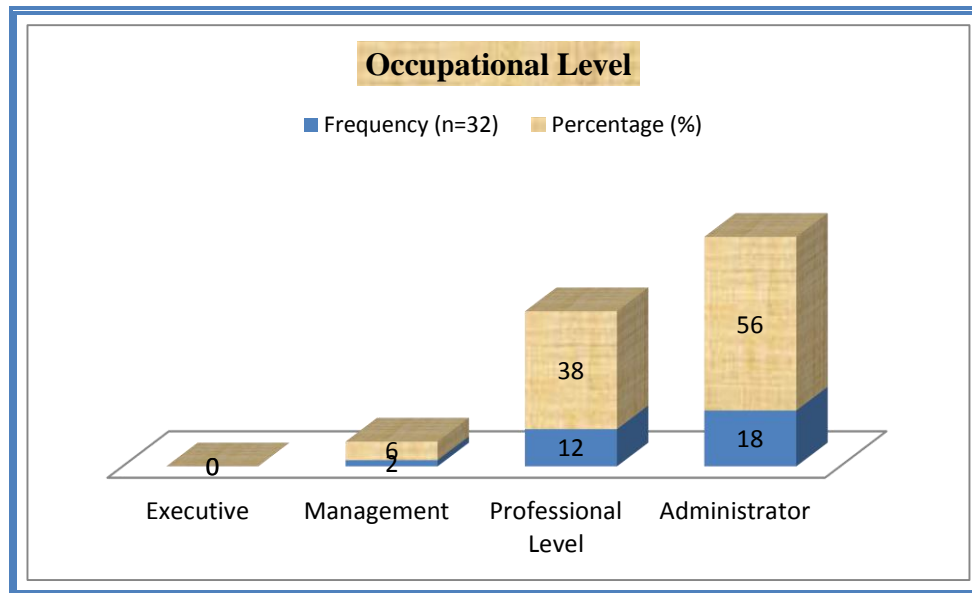
#### 4.1.5 Educational level of participants.



**Figure 4.6:** The distribution of participants according to their educational level.

Results established equal percentage for participants who had standard ten and diploma, each representing 21.9%; while 28.1% each were those participants who had a degree and post graduate qualification (Figure 4.6 in paragraph 4.1.5 above).

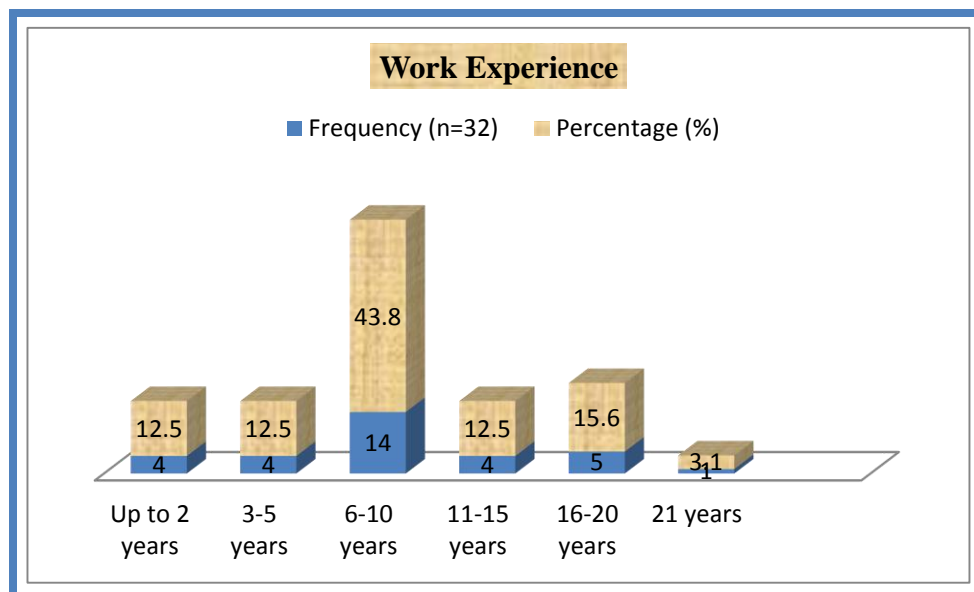
#### 4.1.6 Occupational level of participants.



**Figure 4.7** The distribution of participants according to their occupational level.

It has been established that the Administrators dominated with 56% representation, followed by participants on Professional level with 38% and Managers represented 6%. It further shows that participants in the Executives level were not represented in the study (Figure 4.7 in paragraph 4.1.6 above).

#### 4.1.7 Work experience of participants



**Figure 4.8:** The distribution of participants according to their work experience.

Results established that participants' work experience was higher in the 6-10 years range with 43.8% against the 16-20 years range with 15.6%; while the 2 years, 3-5 years and 11-15 years groups had 12.5% each, and lastly, 3.1% represented participants within the 21+ years group, a category that is representing the 50+ years group in the sample (Figure 4.8 in paragraph 4.1.7 above).

#### 4.2 Participants' HIV testing history

##### 4.2.1 Participants' HIV testing record and HIV testing knowledge

**Table 4.1:** Participants' HIV testing record.

HIV testing history	Frequency (n=32)	Percentage (%)
<b>Question: Have you been tested for HIV before?</b>		
Yes	30 → Females (n=25) Males (n=5)	93.8 → Females (78.1) Males (15.6)
No	2	6.2

If no, why?		
Responses	2) Fear of learning about HIV status, stigma from colleagues	6.2

#### 4.2.1.1 Discussion

Nine questions (Section B) on the questionnaire were devoted to participants' knowledge and experience of HIV testing as well as the testing facility. All participants had to answer the same questions. Besides the demographic information that forms part of this study, participants were asked to indicate if they had tested for HIV and if not, to provide reasons for not having tested. It was established that 30 (93.8%) of participants had been tested for HIV and these participants stated that they would not change anything if their results came out negative. This is indicative of responses that may suggest that participants perceived they were not exposed to risky behavior; or perhaps they led responsible lives and hence, did not find it necessary to change anything. On the other hand, 2 (6.2%) accounted for participants who had not tested (Table 4.1 in paragraph 4.2.1 above). Of those who tested, the majority was females with 78.1 % (25); while 15.6% (5) represented males. Females might have tested in numbers because according to the global and national HIV statistics, sub-Saharan Africa accounts for females between the ages 15-49 years, who are in their prime and productive years, being mostly affected than males (UNAIDS, 2009).

Furthermore, most HIV prevention literature portrays women as vulnerable to HIV infection because of biological susceptibility; while men's sexual power and privilege were reported among many reasons (UNAIDS, 2009). It should be noted that 59.4% of the current study participants indicated that they had tested because they wanted to know their HIV status (Table 4.6 in paragraph 4.2.4 below). Contrarily, in African settings, it has often been shown for example, among South African women who did not accept antenatal screening, none wanted to know their status, and 44% were in fact HIV-positive (UNAIDS, 2001). Several studies have also cited that often those less at risk tend to be more interested in knowing their status (Mkaya et al., 2005).

HIV testing in the workplace is regarded as responsible and preventative behavior that enable employees to know their HIV status, access counseling, care and support. As a result, the quality



of life of those employees who test positive is subsequently improved (SABCOHA, 2002). However, the HIV infection in South Africa is still increasing at an alarming rate posing serious challenges (DoH, 2007). The South African National Antenatal Sentinel HIV and Syphilis estimated that 17% (5.63 million) of adult population was living with HIV and AIDS in 2010; of this number, 3.3 million were females. It should also be noted that the UNAIDS (2012) has since reported that most South Africans who are aware about the availability of HCT services only one in five has since been tested. Despite the established high testing rate (93.8%) in the current study findings (Table 4.2 in paragraph 4.2.2 below), it has been cited on several studies that among the frequently observed patterns of testing, there was the prevalence of the discrepancy between intent to be tested and the actual behavior (Sliep, 2009). A study undertaken to assess predictors of testing intention in one of South African workplace environment, results found out that worries about the consequences of testing were the main reason that made individuals not to execute their plan to take an HIV test (Meadows, 1993). A reported two-third or more of participants in six African countries indicated that they would like to get tested for HIV, it was however established that a proportion of those who reported being tested was actually much low; in some setting the rate of testing was as low as 15% (UNAIDS, 2001)

Rapid testing with same day results has since been instituted in South Africa (DoH, 2007), and IDC aligned its workplace HCT programme guidelines in accordance with the national HCT guidelines. It however emerged according to the IDC HCT programme reports for 2011 and 2012 respectively that out of a total of 118 (18.1%) employees who tested, 75 (23.7%) were females as compared to 43 (12.8%) males in 2011 (Table 1.1); while the 2012 report indicated a decline in uptake rate. Out of the 86 (10.6%) employees who tested, 50 (12.1%) were females and 36 (8.9%) accounted for males (Table 1.3 in paragraph 1.1.7.3 above). A comparative decline of 7.5% in 2012 was established as compared to 2011 HCT uptake rate.

The reports further established that African employees tested more in both years accounting for 22.1% and 13.2% respectively as compared to White employees who were found to have accounted for 8.8% and 4.8% respectively, and being the lowest represented group in both years. Asians and Coloured employees also accounted to less than 12% in both years (Table 1.2 in paragraph 1.1.7.2 above and Table 1.4 in paragraph 1.1.7.4 above). The low HCT uptake

established in 2012 HCT report within IDC contributed to the decision that was taken to undertake this study to investigate the factors that prevented the HCT uptake. In this study, the HIV testing history was not associated with AIDS-related knowledge, which was generally high in the current sample looking at occupational levels the participants held, among the participants there were participants on Administrative Level (56%) and those who were on Professionals Level (38%). Their qualifications ranged from standard ten (21.9%) to post graduate degrees (28%). However, factual based education about HIV transmission is found to be necessary but not sufficient in promoting HCT uptake (Fisher and Fisher, 1992).

Few studies have investigated differentials in HCT utilization to derive general patterns such as the association of education, income, or gender with behaviour regarding testing (Mkaya et al., 2010). The present study was conducted in a highly educational and professional environment, previous studies have found that education is likely to increase awareness and understanding of health-related information as well as increase confidence in taking informed choices. These findings are similar with the findings of the current study in the sense that the majority of participants showed knowledge of HCT 78.1% (Table 4.17 in paragraph 4.3.3.1 below), and also exhibited positive attitudes (78.1%) toward testing for HIV.

It should be noted that the positive association of education and HCT uptake found in this study could be indicative of participants' utilizing their freedom to make their own health-related choices; hence are able to adopt a particular health protective behavior. In contrast to the present study which has established that attitudes (78.1%) are not associated with HCT programme uptake; attitudes were found to be associated with HIV testing history especially among people who have indicated that they had not tested for HIV (Kalichman, 2003). In this study, among the 6.2% of participants who indicated that they had not tested for HIV, attitudes were not associated with HCT uptake. Participants cited reasons such as fear of knowing their HIV status and rejection from friends and colleagues as reasons for them not having tested. Furthermore, 90.7% (Table 4.18 in paragraph 4.3.3.2 below) of participants significantly expressed positive attitudes in that they indicated that they think people would test for HIV if they believe that other people are motivated to use HCT programme in the workplace. The findings thus demonstrated that attitudes are not associated with the uptake of HCT programme.

Several studies on the other hand demonstrated that although people who had not been tested held more negative attitudes towards testing than those who had been tested (Van Dyk, 2001a), two third of those who had not tested believed that testing is helpful, it prevents HIV transmission and more than half of those who have not tested indicated that they wanted to know their status. Within the context of this study, the researcher is of a suggestion that not seeking HIV testing is more of a function of social barriers to getting tested, particularly social rejection associated with AIDS-related stigma similarly established in the current study 78.1% (Table 4.15 in paragraph 4.3.2.2 below), than a lack of perceived value of getting tested (WHO, 2003).

#### 4.2.2 Participants' responses after testing for HIV

**Table 4.2:** Participants' responses after testing

HIV testing history	Frequency (n=32)	Percentage (%)
<b>Question: How did you feel after your last test?</b>		
Commented	26	81.2
Did not comment	6	18.8

##### 4.2.2.1 Participants' comments after testing for HIV

**Table 4.3:** Participants' comments on how they felt after testing

Number and % of respondents who commented	Comments
10 (38.5)	Felt happy for my responsible action
9 (34.6)	Felt confident
4 (15.3)	Felt relieved and safe
3 (11.3)	Felt good for using protection

#### 4.2.2.2 Discussion

Participants were asked to indicate how they felt after their last test and 18.8% did not comment. It is possible that the 6.2% (Table 4.2 in paragraph 4.2.2 above) who had not tested are among these participants who did not comment; while several expressions came from 81.2% (Table 4.2 in paragraph 4.2.2 above) of participants indicating that they felt happy for having taken a responsible act by testing, felt confident, and felt relieved and good for using protection (Table 4.3 in paragraph 4.2.3 above). It was established as such that 93.8% of participants stated that the negative results would not make them change anything (Table 4.7 in paragraph 4.2.5 below). Without the researcher sounding to suggest that these participants 's results might have been negative, such positive comments indicate a sense of contentment rather than fear, a sense of despair, feeling of guilt, shame, worry and sometimes shock which is often associated with HIV (UNAIDS, 2010). A study conducted to evaluate the uptake of HCT factory workers in Cape Town, South Africa found out that feeling of despondency, misery, helplessness, depression, unhappiness and dejection were experienced by most participants when they were asked how they felt about testing for HIV (Kalichman et al., 2007). People still feel frightened though because it is common knowledge that there is neither cure nor vaccine as yet for HIV, and most people who are infected are not aware until illness ensues; unless they undertake HIV testing to learn about their HIV status (UNAIDS, 2010). It is worth mentioning however that HIV and AIDS is manageable and controllable, as such; it is classified as a life-threatening disease like Cancer and chronic illnesses (USAID, UNAIDS, WHO, UNICEF, 2003)..

The improved availability of antiretroviral treatment, care and support including the prevention strategies; as well as collaborative partnership of government, business and civil societies, is evidence enough for people to realize a paradigm shift in a way in which HIV and AIDS matters are now handled (DoH, 2012)..

#### 4.2.3 Participants' responses on how they would react if the results came out positive

**Table 4.4:** Participants' responses regarding their reaction on the HIV positive results

HIV testing history	Frequency (n=32)	Percentage (%)
<b>Question: Have you thought of how you would react if the test comes out positive?</b>		

Commented	31	96.9
Did not comment	1	3.1

#### 4.2.3.1 Participants' comments on how they would feel if the results came out positive

**Table 4.5:** Participants' comments on how they would feel if the results would come out positive

Number and % of respondents who commented	Comments
20 (65.5)	I would accept the results because HIV is manageable
5 (15.6)	I would seek advice or consult
2 (6.2)	I would be angry
1 (3.2)	I would speak to my mother and sister
1 (3.2)	I would tell my daughter
1 (3.2)	I would be devastated
1 (3.2)	I would not tell anyone

##### 4.2.3.1.1 Discussion

When asked how they would react if the results would come out positive; only one (3.1%) of participants did not comment. This participant can either be one of those participants who had not tested (6.2%), or can be from those who had tested. It should be mentioned though that 96.9% of participants cited different reactions stating that they would accept the results because HIV and AIDS is manageable (65.5%), others stated that they would seek advice and consult (15.6%); while those who stated that they would tell their mother and sister as well talk to their daughter accounted for 3.1% each. This gave a clear indication that there is a sense of accountability, knowledge about what is meant by HIV positive and that those participants envisaged receiving support from their significant others. Contrarily, 6.2% of participants indicated that they would be angry; while 3.1% each indicated that they would be devastated and that they would not tell

anyone. This means that 12.5% of participants expressed opposite feelings as compared to 87.5% who seemed to be ready for appropriate available interventions. It worth mention that people respond differently to the same stimuli and therefore the 12.5% of participants would need counseling and support in accepting their results in order that referral for relevant interventions can be provided.

#### 4.2.4 Participants' reasons for testing for HIV

**Table 4.6:** Participants' reasons for testing for HIV

History of testing	Frequency (n=32)	Percentage (%)
<b>Question: What were the reasons for getting tested for HIV?</b>		
Wanted to know my status	19	59.4%
Insurance Policy	4	12.5
Future planning	3	9.3
Medical referral	2	6.3
After receiving counseling	2	6.3
Other reasons not stated above	2	6.3

Of those participants who tested, 59.4% reported that they tested because they wanted to know their HIV status, 12.5% tested for insurance policy requirement, 9.3% considered testing in the process of planning for their future and lastly, 6.3% each tested because they were medically referred, after a positive counseling session and other reasons were probably from the two respondents who had not tested (Table.4.6 in paragraph 4.2.4 above).

#### 4.2.5 Participants' responses on whether HIV negative results would change what they are doing

**Table 4.7:** Participants' comments on whether the negative HIV results would change what they are doing

History of testing for HIV	Frequency (n=32)	Percentage (%)
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<b>Question: Would HIV negative result change anything you are doing</b>		
No	30	93.8
Did not comment	2	6.2

It was established that the majority of participants, 93.8 % indicated that the negative HIV results would not change anything; while 6.2% did not comment; this may probably be the participants who indicated that they had never tested (Figure 4.7 in paragraph 4.2.5 above).

#### 4.2.6 Testing facilities used by participants when testing for HIV

**Table 4.8:** Testing facilities used by participants when they tested for HIV

<b>History of testing</b>	<b>Frequency (n=32)</b>	<b>Percentage (%)</b>
<b>Question: Indicate the testing facility utilized for testing</b>		
Workplace HCT Programme	14	43.8
Private facilities	16	50
Public facilities	0	0
Standalone site	0	0

#### 4.2.7 Reasons for using a particular testing facility

**Table 4.9:** Participants' responses regarding the reasons for using a particular testing facility

<b>History of testing</b>	<b>Frequency (n=32)</b>	<b>Percentage (%)</b>
<b>Question: Give reasons for selecting a particular facility</b>		
Convenience	14	43.8
Confidentiality	15	46.9
Privacy	3	9.3
Staff competence	0	0

#### 4.2.7.1 Discussion

It was established that of the total number of participants who had tested, 50% (Table 4.8 in paragraph 4.2.6 above) indicated that they used private facilities because of privacy and confidentiality issues; while 43.8% used the workplace HCT programme because of convenience and, no one used the public facilities and standalone sites (Tables 4.8 in paragraph 4.2.6 above and Table 4.9 in paragraph 4.2.7 above). The study established therefore that confidentiality and privacy issues 78.1% and 75% respectively (Table 4.12 in paragraph 4.3.1.3 below and Table 4.13 in paragraph 4.3.1.4 below) were associated with HCT programme uptake. On other hand, 46.9% of participants knew that HCT programme is provided within IDC; while 28.1% knew that pre-test counseling is provided; 18.9% knew about post-test counseling and, 6.3% knew about on-going counseling.

None of the respondents knew that ART is provided through IDC Medical Aid (Table 4.10 in paragraph 4.2.8 below). This gives a general feeling that the participants are aware of the disease management programme afforded to them through the medical aid. However, it is important to mention that most of them do not understand how the medical aid functions regarding the provision of antiretroviral treatment. Secondly, it might be that they are not involved hence they lack information in that regard. The lowest proportion of 6.2% as compared to 93.8% indicated that fear of knowing one's HIV status is associated with HCT uptake.

#### 4.2.8 HCT Services that are provided within IDC

**Table 4.10:** Participants' responses about the HCT services provided within IDC

History of testing	Frequency (n=32)	Percentage (%)
<b>Question: What HCT services are provided at your workplace?</b>		
Pre-test counseling	9	28.1
HCT programme	15	46.9
Post-test counseling	6	18.9
On-going counseling	2	6.3



Provision of ART	0	0
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### 4.3 Result findings on the factors that prevent the HCT uptake programme

#### 4.3.1 Fear of learning about one's HIV status

4.3.1.1 Responses to the statement: People do not test for HIV because they fear knowing their HIV status, are presented in table 4.11 below.

**Table 4.11:** Participants' responses on the fear of learning about their HIV status

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	2	6.3	6.3	6.3
Agree	0	0	0	0
Neutral	0	0	0	0
Disagree	20	62.5	62.5	68.8
Strongly Disagree	10	31.2	31.2	100
Total	32	100	100	

It was established that the majority of participants accounting for 93.8% disagreed that people do not test for HIV because they fear knowing their HIV status; 6.2% of respondents who have agreed are probably the respondents who had indicated that they had never tested for HIV (Table 4.11 in paragraph 4.3.1 above).

#### 4.3.1.2 Discussion

A great proportion of study participants that accounted for 93.7% (Table 4.11 in paragraph 4.3.1 above) indicated that fear is not associated with HCT uptake. In addition, the same proportion also stated that a negative HIV status would not change anything they are doing (Table 4.7 in paragraph 4.2.5 above). Of these, a strong correlation is provided by 59.4% that tested because they wanted to know their HIV status. This is suggestive that participants took informed choices and that they were ready to live responsible lives.

Furthermore, it should be mentioned that 12.5% of participants tested because it was required of them for Insurance policy purposes; while 9.3% tested because they were planning their future and lastly, 6.2% of participants both tested because they were medically referred as well as having received positive counseling, which motivated them to test. In all of these mentioned reasons, it is clear that fear was not associated with testing; rather, a significant proportion of 93.8% had in fact tested for HIV (Table 4.1 paragraph 4.2.1 above). Furthermore, a proportion of 78.1% as well as 75% respectively indicated that confidentiality and privacy are associated with workplace HCT programme uptake (Table 4.12 in paragraph 4.2.1.3 and Table 4.13 above in paragraph 4.2.1.4 above). Without suggesting or sounding to object the statements, paragraph 1.1.7 above provides principles as well as measures put in place within IDC to ensure and promote confidentiality and privacy when conducting HIV testing. The concern might have been raised as a result of lack of knowledge that HIV results and the report thereof is forwarded for the attention of the wellness specialist and that the information is not shared with anyone.

4.3.1.3 Responses to the statement: People do not test for HIV because they fear that their results will not be kept confidential, are presented in table 4.12 below.

**Table 4.12:** Participants' responses on the fear of testing because their results would not be kept confidential.

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	8	25	25	25
Agree	17	53.1	53.1	78.1
Neutral	0	0	0	0
Disagree	4	12.5	12.5	90.6
Strongly Disagree	3	9.4	9.4	100
Total	32	100	100	

Seventy-eight-point-one percent of participants agreed that people do not test because they fear that their results will not be kept confidential; 21.9% disagreed (Table 4.12 in paragraph 4.3.1.3 above).

4.3.1.4 Responses to the statement: People do not test for HIV because privacy is not maintained, are presented in table 4.13 below.

**Table 4.13:** Participants' responses on maintenance of privacy

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	6	18.7	18.7	18.7
Agree	18	56.3	56.3	75
Neutral	0	0	0	0
Disagree	4	12.5	12.5	87.5
Strongly Disagree	4	12.5	12.5	100
Total	32	100	100	

It was established that 75% of participants agree that lack of privacy prevent people from testing for HIV; while 25% disagree (Table 4.13 in paragraph 4.3.1.4 above).

#### 4.3.2 Stigma and discrimination

4.3.2.1 Responses to the statement: People would not test for HIV because of stigma associated with the disease, are presented in table 4.14 below.

**Table 4.14:** Participants' responses on fear of stigma and the associated discrimination

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	10	31.3	31.3	31.3
Agree	12	37.5	37.5	68.8
Neutral	0	0	0	0
Disagree	5	15.6	15.6	84.4
Strongly Disagree	5	15.6	15.6	100
Total	32	100	100	

4.3.2.2 Responses to the statement: People do not test because of fear of rejection from family, friends and colleagues, are presented in table 4.15 below.

**Table 4.15:** Participants' responses on the rejection by family, friends and colleagues

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	9	28.1	28.1	28.1
Agree	16	50	50	78.1
Neutral	6	18.8	18.8	96.9
Disagree	1	3.1	3.1	100
Strongly Disagree	0	0	0	0
Total	32	100	100	

4.3.2.3 Responses to the statement: People do not test for HIV because they fear that they may be dismissed from work if their employer finds out about their status, are presented in table 4.16 below.

**Table 4.16:** Participants' responses on the fear of dismissal if the employer finds out about their HIV status

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	7	21.9	21.9	21.9
Agree	3	9.4	9.4	31.3
Neutral	7	21.9	21.9	53.2
Disagree	5	15.6	15.6	68.8
Strongly Disagree	10	31.2	31.2	100
Total	32	100	100	

#### 4.3.2.4 Discussion

The results established that workplace HIV-related discrimination was not associated with HCT programme uptake in that a proportion of 46.8% (Table 4.16 in paragraph 4.3.2.3 above) disagreed

that people do not test because they fear dismissal from work if their employer can find out about their HIV status; in contrast, 31.3% agreed to that statement and while 21.9% of participants were neutral. Paragraph 1.1.7 above provides background information regarding HIV and AIDS management within IDC. It also outlines Management's aims and commitments of approving the related HIV and AIDS policy and management programmes. It is within this context that the majority of participants' responses did not associate discrimination with HCT programme uptake. However, there remain efforts to be made to ensure that workplace policies and programmes are well communicated and well understood within the Corporation to create and promote a universal consensus. The results showed that both participants who had tested and those who had not tested 68.8% (Table 4.14 paragraph 4.3.2.1 above) held significantly greater AIDS-related stigmas. They agreed that people would not test for fear of stigma associated with the disease. Similarly, social stigma that displays rejection from family, friend and colleagues accounted for 78.1% (Table 4.15 in paragraph 4.3.2.2 above) in the study findings.

Recurrent research findings demonstrated that most people do not test and if they do, they do not return for their HIV results mainly because of fear, not only of stigma but because of social consequences associated with the disease that impact on people's relationships and interactions. We have been informed of the significant medical and scientific advances made so far to treat HIV and AIDS including TB. Similarly, much has been accomplished so far with regards to education and awareness; however, knowledge appears to only be a necessary precursor to reducing stigma and thus, the effects of stigma far outweighs the advantages advocated for disclosure. As a result, AIDS-related stigma remains rife making HIV and AIDS an unspeakable disease (UNAIDS, 2009).

A study conducted in Ethiopia amongst men to determine factors influencing HIV utilization established the association between AIDS-related stigma (HIV testing was found to be very low). Another study conducted in the black township in Cape Town, South Africa established that individuals who were not tested for HIV demonstrated significantly greater AIDS-stigmas, ascribing greater shame, guilt and social disapproval (Kalichman & Simbayi, 2004); sentiments that probably influenced participants of the current study to express concerns around social rejection related to AIDS-stigma. It should be mentioned that the effects of AIDS-stigma are felt

even within the context of wider societies and communities. Given the fact that the majority who participated in this study were Africans (84.4%), and the fact that AIDS-stigmas in the black townships still need structural interventions to change people's beliefs about people who are living with HIV (PLWHA), it goes without saying that the concerns raised are justifiable.

#### 4.3.3 Knowledge of and attitudes towards HIV testing

4.3.3.1 Responses to the statement: People do not test for HIV because they are not informed about HIV testing, are presented in table 4.17 below.

**Table 4.17:** Participants' responses on HCT knowledge

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	1	3.1	3.1	3.1
Agree	1	3.1	3.1	6.2
Neutral	5	15.6	15.6	21.8
Disagree	19	59.3	59.4	81.2
Strongly Disagree	6	18.8	18.8	100
Total	32	100	100	

The majority of participants that accounted for 78.1% disagreed that people do not test for HIV because they are not informed about HCT; 6.2 % agreed and 15.6% were neutral (Table 4.17 in paragraph 4.14 above)

4.3.3.2 Responses to the statement: People will test for HIV if they believe that other employees are motivated to use HIV programme in the workplace, are presented in table 4.18 below.

**Table 4.18:** Participants' responses on their belief regarding others' motivation to test at the workplace HCT programme.

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly Agree	14	43.8	43.8	43.8

Agree	15	46.9	46.9	90.7
Neutral	2	6.2	6.2	96.9
Disagree	1	3.1	3.1	100
Strongly Disagree	0	0	0	0
Total	32	100	100	

It was established that 90.7% of participants indicated that people will test for HIV if they believe that other employees are motivated to use facilities in the workplace; 3.1% disagreed and 6.2% were neutral (Table 4.18 in paragraph .4.3.3.2 above).

#### 4.4 Summary of results

Given the fact that the goal of this study was to test specific hypothesis, namely:

- Hypothesis 1: Fear of learning about one's HIV status contributed to low HCT uptake;
- Hypothesis 2: HIV-related stigma and discrimination contribute to low HCT uptake; and
- Hypothesis 3: Knowledge of and attitudes towards HIV testing contribute to low HCT uptake; it should be noted that in fact, a significantly high proportion (93.8%) of participants reported to have tested for HIV as compared to 6.2% who had not tested. Fear of learning about one's HIV status was therefore not found to be associated with HCT programme uptake since majority (59.4%) of participants tested because they wanted to know their HIV status. Similarly, the results findings revealed that 78.1% of participants knew about HCT and the associated services provided within IDC; responding positively when asked how they would respond to HIV positive as well as negative results.

It however emerged that in both participants who had tested for HIV and those who had not tested (68.8%) HIV and AIDS-related stigma was associated with HCT programme uptake; factors such as confidentiality and privacy were raised as issues of concern. The study further established that social stigma related to the disease such as fear of rejection by family, friend and colleagues prevented HCT programme uptake. This contributed to 50% of participants using private facilities as compared to 46.3% who used HCT programme within IDC. Furthermore, the report of the HCT programme revealed that Executive Managers neither took part in the wellness

events of 2011 and 2012 where HIV testing was part of the services provided, nor did they form part of the study participants in November 2013 where HIV testing was also provided.

Despite the fact that these initiatives were always voluntary, it is worth mentioning that such HIV programmes within the Corporation should form part of a wider agenda where collaborative partnerships, leadership involvement and commitment is openly demonstrated to encourage participation by all employees. More to note is the fact that the majority of participants in the study (84.4%) were Africans. Similarly, they were also in the majority in the 2011 and 2012 HCT report of those employees who tested.



## **CHAPTER FIVE: LIMITATIONS AND RECOMMENDATIONS**

### **5.1 Limitation of the study**

The results of this study provide information about factors that potentially prevent HCT programme uptake within IDC. However, there are important limitations to the study that should be considered when interpreting these findings.

The researcher had intended to conduct this study with a sample of 50 out of 60 questionnaires which were distributed. Questionnaires were expected to be completed within 10-15 minutes and returned before participants left the auditorium where the wellness day was held. Despite the fact that questions were open and closed-ended, simple and easy to answer, half of the participants left the auditorium without returning the questionnaires hence participation rate was 53.3% as compared to 83.3% that was anticipated.

The study was conducted at IDC, a state owned institution in Johannesburg, South Africa. Although this province is the third largest with low HIV positive results among people who tested in the National HCT campaign conducted in 2009 as compared to Mpumalanga (24%) and KwaZulu-Natal (22%) according to the National HCT Guidelines; nearly all participants of the current study were Africans 84.4% as compared to other race groups who were represented at a lower rate. Caution should therefore be exercised not to generalize the findings to other geographic regions and demographic groups since the sample was not representative of a general population.

Nonresponse error which might have been due to personal questions asked on the questionnaire, also might have affected the results although very few nonresponses were encountered. The study design was cross sectional and therefore did not permit predictive, directional or causal interpretations of the findings; and the results of the HIV testing conducted in November 2013 could not be included in this research since the HCT report was not yet available.

## 5.2 Recommendations

Based on the findings of the study, the following recommendations were made:

HIV and AIDS-related stigma has been found to prevent the HCT programme uptake; hence, the significance of combating the effects of workplace stigma cannot be undervalued. Social stigma that displays rejection from family, friend and colleagues also had significant association with HCT programme uptake. It is important therefore to consider individual and societal factors that are associated with the use of HCT services. In particular, more emphasis should focus on developing the workplace stigma mitigation strategy. A comprehensive stigma mitigation response should include carefully considered five key elements of a holistic approach as part of an operational plan towards addressing stigma. The rationale for each element is as follows:

<b>Priority Area</b>	<b>Importance</b>
Information	To reduce fears and myths on HIV and AIDS and increase understanding of stigma and its effects on HIV vulnerability and response to AIDS.
Advocacy	To strengthen commitments to action on stigma reduction and build leadership on stigma mitigation.
Policy	To enhance the policy environment to create a supportive environment within a coordinated, right-based response to HIV and AIDS.
Multisectoral Collaboration	To improve the coherence, comprehensiveness, and collaborative nature of stigma-reduction activities as an integral part of an effective response to HIV and AIDS
Research	To increase access to evidence-based information related to stigma, for effective decision making.

Wellness champions as custodians of the HCT programme, should drive the implementation process that is integrated in the awareness, educational campaigns and workshops. These should also include disseminating information, engaging in open and mature dialogue on matters related to HIV and AIDS. The creation of a conducive and an enabling environment should be central to de-stigmatizing the environment; involving stakeholders both at senior and junior level that would potentially enhance participation on HCT programme. Conduct regular workshops which are interactive to encourage employees to express their fears. Employees should be empowered with information related to maintenance of confidentiality and how matters of privacy are upheld when testing is conducted. Furthermore, the benefits of and importance of testing should always form part of workshops and awareness campaigns. It is suggested that a comparable study on a larger scale to be conducted in other workplace settings to explore similar influences in those facilities so that comparisons to the current study can be drawn.

## **CHAPTER SIX: CONCLUSION**

The economic, health and developmental burden posed by HIV and AIDS affect society and business alike. The most productive segment of the working population is faced with the consequences that come with the disease. It is within this context that business recognizes the seriousness of HIV and AIDS epidemic and its impact on the workforce. Apart from ensuring that factors associated with workplace related stigma are eliminated to create a conducive and enabling environment, policies and guidelines should be put in place to ensure a consistent and equitable approach to the management and prevention of the disease. Furthermore, investment at an organizational level has the potential of making a considerable impact on the workplace environment. It is therefore imperative that businesses commit to create environments that encourage employees to know their HIV status. Research shows that HIV testing is the most effective intervention in reducing the risk of HIV to the organization and the individual, meaning that HCT is a win-win situation for the organization and the individual.

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## **ADDENDA**

### **Addendum A: Questionnaire**

#### **APPENDIX B- ANONYMOUS QUESTIONNAIRE FOR EMPLOYEES**

#### **SELF- ADMINISTERED ANONYMOUS QUESTIONNAIRE**

##### **EMPLOYEES ANONYMOUS QUESTIONNAIRE**

**This questionnaire is anonymous; participation is voluntary and kindly note that you can withdraw your participation at any time. Please do not write your name or personal particulars on this document. Please note that responses are confidential and cannot be used to identify individuals.**

**Kindly note that some questions may be sensitive but we request for utmost honesty in your responses.**

#### **Section A- Demographic Information**

**(Please answer the following questions by placing a cross (X) next to the most appropriate options).**

##### **1. Respondent's Gender**

**Male    1**

**Female 2**

##### **2. How old are you?**

**20-29    1**

**30-39    2**

**40-49    3**

**50+ 4**

##### **3. What is your marital status?**

- Single 1**
- Married 2**
- Divorced 3**
- Widowed 4**

**4. What is your race?**

- African 1**
- White 2**
- Coloured 3**
- Indian 4**
- Other**

**Please specify..... 5**

**5. What is your highest level of education?**

- Standard Ten 1**
- Diploma 2**
- Degree 3**
- Post Graduate 4**

**6. Which position do you hold?**

- Executive 1**
- Management 2**
- Professional3**
- Administrator 4**

**7. Work experience in years**

- Up to 2 years 1**
- 3-5 years 2**
- 6-10years 3**
- 11-15years 4**
- 16-20 years 5**



21 years+ 6

**Section B-Knowledge of HIV counselling and testing and the facility where it is provided.**

**(Please answer the following question by placing a cross (X) next to the most appropriate option).**

**8. Have you been tested for HIV before?**

**Yes 1**

**No 2**

**9. If no, why?**

**(Please express your views below).**

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**10. If yes, where did you test?**

**(Please answer by placing a cross (X) next to the most appropriate option).**

**Work HIV testing programme 1**

**Public facility 2**

**Private facility 3**

**Standalone site 4**

**11. Reasons for selecting a particular facility**

**(Please answer by ticking all applicable)**

**Staff is competent in providing the HIV counselling and testing service 1**

**Privacy is maintained (no one can tell that I went for a test) 2**

**My information will be treated confidential 3**

**Convenience of the facility 4**

**Other reason(s)**

**Please specify..... 5**

**12. What were the reasons for getting tested for HIV?**

**(Please answer by placing a cross (X) next to the most appropriate option).**

**Wanted to know my status 1**

**Referred by Doctor 2**

**For policy reasons (mandatory) 3**

**I was counselled on how to live positively and then I decided to test 4**

**Future planning based on the results 5**

**Other reasons not stated above**

**Please specify reason(s)..... 6**

**13. How did you feel after your last test?**

**(Please express your views below)**

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**14. What HIV services are provided at your workplace?**

**(Please answer by ticking all applicable)**

**Pre-test counselling 1**

**HIV testing programme 2**

**Post-test counselling 3**

**On-going counselling 4**

**Provision of antiretroviral treatment 5**

**15. Have you thought about how you might react if the test came back positive?**

**(Please express your views below)**

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**16. Would a negative result change anything you are doing?**

**(Please express your views below)**

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**Section C- Attitudes towards and fear of testing for HIV as well as HIV and AIDS-related stigma and discrimination.**

**State whether you Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D) or Strongly Disagree (SD) by circling the most appropriate statement stated below according to your views.**

- 1. People will test for HIV for health reasons. SA A N D SD**
- 2. People do not test for HIV because of fear of rejection by family, friends and colleagues at work. SA A N D SD**
- 3. People do not test for HIV because they fear that they may be dismissed from work if their employer finds out. SA A N D SD**
- 4. People do not test for HIV because they fear that privacy is not maintained. SA A N D SD**
- 5. People do not test for HIV because they fear that their results will not be kept confidential. SA A N D SD**

6. People do not test for HIV because of their religious convictions. SA A N D SD
7. People do not test for HIV because of their cultural beliefs. SA A N D SD
8. People do not test for HIV because they are not informed about HIV and AIDS. SA A N D SD
9. People will test for HIV if the testing would be provided for longer working hours. SA A N D SD
10. People would test for HIV if they have seen those they trust and look up to also going for HIV testing. SA A N D SD
11. People will test for HIV if they believe that other employees are motivated to use HIV facilities in the workplace. SA A N D SD
12. People will test for HIV if they believe they are HIV negative. SA A N D SD  
State whether you Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D) or Strongly Disagree (SD) by circling the most appropriate statement stated below according to your views.
13. People will test for HIV if they believe they are at risk of contracting HIV. SA A N D SD
14. People will test for HIV if they trust the health care professionals providing the service. SA A N D SD
15. People will test for HIV if they are encouraged by friends or colleagues. SA A N D SD
16. People will test for HIV if they trust the accuracy of the testing device. SA A N D SD
17. People will test for HIV if they are motivated about positive living. SA A N D SD
18. People would test for HIV if they are rewarded with an incentive for motivational purposes. SA A N D SD
19. People who are living with HIV and AIDS should not work with children. SA A N D SD
20. People living with HIV and AIDS are cursed, shameful and weak SA A N D SD

**21. Please indicate in your views what can be done to improve on the current HIV counselling and testing programme in order to increase the testing uptake.**

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**THANK YOU FOR YOUR TIME.**



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**Approval Notice**  
**Stipulated documents/requirements**

06-Nov-2013  
MOOKETSI, Mapule Linah

**Proposal #:** HS981/2013

**Title:** Factors preventing uptake of HIV counseling and testing programme

Dear Ms Mapule MOOKETSI,

Your Stipulated documents/requirements received on 06-Nov-2013, was reviewed by members of the Research Ethics Committee: Human Research (Humanities) via Expedited review procedures on 06-Nov-2013 and was approved.  
Sincerely,

Susara Oberholzer  
REC Coordinator  
Research Ethics Committee: Human Research (Humanities)